California Regional Water Quality Control Board
Santa Ana Region

Linda S. Adams
Secretary for
Environmental Protection

3737 Main Street, Suite 500, Riverside, California 92501-3348
Phone (951) 782-4130 • FAX (951) 781-6288
www.waterboards.ca.gov/santaana

Arnold Schwarzenegger
Governor

July 23, 2009

TO: The Attached Mailing list

RENEWAL OF WASTE DISCHARGE REQUIREMENTS FOR THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, THE COUNTY OF RIVERSIDE, AND THE INCORPORATED CITIES OF RIVERSIDE COUNTY, TENTATIVE ORDER NO. R8-2009-0033, NPDES NO. CAS618033, AREA-WIDE URBAN RUNOFF MANAGEMENT PROGRAM

This order renews waste discharge requirements for the discharge of urban runoff from areas of Riverside County within the Santa Ana Region. This item will be discussed at a public workshop on August 3, 2009.

The Regional Board will not take any action on these items at the August 3, 2009 public workshop. The primary purpose of the workshop will be to review and solicit comments on the renewal of the subject waste discharge requirements. For the accuracy of the record, all oral comments should also be submitted in writing. All comments **received prior to September 4, 2009** will be considered during formulation of the next draft of this tentative order. We will respond to all comments either in writing or during subsequent workshops and/or public hearings. This item will be scheduled for a public hearing at a later date, and all interested parties will be notified.

A copy of the agenda for the August 3, 2009 Public Workshop can be downloaded from: http://www.waterboards.ca.gov/santaana/water_issues/programs/stormwater/docs/rc_sbc_ms4_public_hearing_aug_3_2009.pdf

To be notified of future draft releases, workshops and public hearings, please sign on to our E-mail notification list (select "Storm Water – Riverside County Municipal") at: http://www.waterboards.ca.gov/resources/email_subscriptions/reg8_subscribe.shtml.

If you have any questions, please call me at (951) 782-3238, Milasol Gaslan at (951) 782-4119, or Keith Elliott at (951) 782-4925.

Sincerely,

Michael J. Adackapara
Division Chief

State of California
California Regional Water Quality Control Board
Santa Ana Region

August 3, 2009

ITEM: **2**

SUBJECT: First Public Workshop, Renewal of Waste Discharge Requirements, Riverside County Flood Control and Water Conservation District, the County of Riverside, and the Incorporated Cities of Riverside County within the Santa Ana Region, Urban Runoff Management Program (NPDES No. CAS618033)

BACKGROUND

This is the first public workshop to be held on the re-issuance of the Riverside County municipal storm water permit. Comments received during this workshop and written comments received by September 4, 2009, will be considered for future revisions to this draft. The final draft permit will be considered by the Board for adoption at a public hearing during one of the regularly scheduled Board Meeting at a later date.

DISCUSSION

See attached Fact Sheet.

RECOMMENDATION

This is an information item and an opportunity for public comment. The Board will not take any action on this item at the August 3, 2009 workshop.

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION

ORDER NO. R8-2009-0033
NPDES NO. CAS 618033

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND WASTE DISCHARGE REQUIREMENTS FOR THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, THE COUNTY OF RIVERSIDE, AND THE INCORPORATED CITIES OF RIVERSIDE COUNTY WITHIN THE SANTA ANA REGION

AREA-WIDE URBAN RUNOFF MANAGEMENT PROGRAM

The following Discharger(s) are subject to waste discharge requirements as set forth in this Order:

Table 1. Municipal Permittees (Dischargers)

Principal Permittee	Riverside County Flood Control and Water Conservation District (RCFC&WCD)*	
Co–Permittees	1. Beaumont	9.. Moreno Valley
	2. Calimesa	10. Murrieta
	3. Canyon Lake	11. Norco
	4. Corona	12. Perris
	5. County of Riverside (County)	13. Riverside
	6. Hemet	14. San Jacinto
	7. Lake Elsinore	15. Wildomar
	8. Menifee	

The Principal Permittee and the Co-Permittees are collectively referred to as the Permittees or the Dischargers.

Table 2. - Administrative Information

This Order was adopted by the Regional Water Board on:	**XXXX, 2009**
This Order will become effective on:	**XXXX, 2009**
This Order will expire on:	**XXXX, 2014**
The U.S. Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board have classified this discharge as a major discharge.	
The Discharger must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than 180 days in advance of the Order expiration date.	

IT IS HEREBY ORDERED, that this Order supersedes Order No. R8-2002-0011 except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted there under, and the provisions of the federal Clean Water Act (CWA), and regulations and guidelines adopted there under, the Permittees must comply with the requirements in this Order.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that this Order No. R8-2009-0033 with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on XXXX, 2009.

_____
Gerard J. Thibeault, Executive Officer

Intentionally Blank

TABLE OF CONTENTS

LIST OF TABLES

LIST OF APPENDICIES

Intentionally Blank

I. FACILITY INFORMATION

A. Each of the municipalities listed in Table 1, above, hereinafter called Permittees, owns and/or operates municipal separate storm sewer systems (MS4[1]), through which Urban Runoff [1] is discharged into Waters of the United States (Waters of the U.S.) that are located within the Santa Ana Region. The MS4 fall into one or more of the following categories: (1) a medium or large MS4 that services a population of greater than 100,000 or 250,000 respectively; or (2) an MS4 which contributes to a violation of a Water Quality Standard; or (3) an MS4 which is a significant contributor of Pollutants to Waters of the U. S.; or (4) an MS4 owned and/or operated by a small municipality that is interrelated to a medium or large municipality. Section 402(p) of the CWA requires that discharges of Urban Runoff from MS4s be regulated under a National Pollutant Discharge Elimination System (NPDES) permit.

B. This Order regulates the discharge of Pollutants (as defined in Appendix 4, Glossary) in Urban Runoff from anthropogenic (generated from non-agricultural human activities) sources from the MS4 that is owned and/or operated by the Permittees.

C. The Permittees have established legal authority to control discharges into the MS4 facilities that they own, operate and/or regulate. As owners and/or operators of the MS4, the Permittees are responsible for discharges into the MS4 facilities they regulate. The discharge of Pollutants into the MS4 may cause or contribute to, or threaten to cause or contribute to, a condition of Pollution in Receiving Waters. Federal regulations, 40 CFR 122.26(d)(2)(i), require the Permittees to control the discharge of Pollutants into the MS4s to the maximum extent practicable (MEP, see Appendix 4).

D. The Permittees have identified major outfalls (with a pipe diameter of 36 inches or greater or drainage areas draining 50 acres or more) and have submitted maps of existing MS4 facilities. The Co-Permittees reported having approximately 395 miles of underground storm drains, and 65 miles of channels[2]. The RCFC&WCD reported having 300 miles in underground storm drains and 103 miles of channels.

E. On February 5, 2008 Wildomar residents voted for cityhood and the city incorporated on July 1, 2008. Menifee residents voted for cityhood on June 3, 2008 and the city incorporated on October 1, 2008. Both cities in letters dated May 5 and May 6, 2009, respectively, have expressed their intent to be a Co-Permittee in this Order and for the purposes of this Order shall be considered as such. Urban Runoff from the cities of Menifee, Murrieta and Wildomar discharges into watersheds within the Santa Ana Regional Board and the San Diego Regional Board jurisdictions. Therefore, these cities are regulated by MS4 permits issued by both Regional Boards. Urban Runoff

1 See Appendix 4.
[2] Section 3.6.1 of the 2007 ROWD.

from the County of Riverside and RCFC&WCD discharge into watersheds within the Santa Ana, San Diego and Colorado River Region Regional Board jurisdictions. Therefore, these entities are regulated by MS4 permits issued by three Regional Boards.

F. The Permit Area contains 1,396 square miles or 19.1% of the 7,300 square miles within Riverside County and includes 14 of the 26 municipalities within Riverside County. The California Department of Finance estimates that as of January 1, 2008, the population of Riverside County is 2,088,322. The more densely populated areas of Riverside County are located within the Santa Ana Regional Board's jurisdiction. Other portions of Riverside County are regulated by the San Diego and the Colorado River Basin Regional Boards.

II. FINDINGS

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter the "Regional Board") finds that:

A. BACKGROUND

1. The Permittees own and operate storm drains, including flood control facilities. Some of the natural channels, streambeds and other drainage facilities that are generally considered as Waters of the U.S. have been converted to flood control facilities. In such cases, where a natural streambed is modified to convey storm water flows, the conveyance system becomes both a MS4 and a Water of the U. S.

2. The Permittees are currently discharging pursuant to Order No. R8-2002-0011, NPDES Permit No. CAS 618033. This Order renews Order No. R8-2002-0011 and regulates discharges of Urban Runoff from the MS4 within Riverside County.

3. On April 27, 2007, the Riverside County Flood Control and Water Conservation District (hereinafter referred to as "RCFC&WCD" or "Principal Permittee"), in cooperation with the County of Riverside, (the "County") and the incorporated cities of Beaumont, Calimesa, Canyon Lake, Corona, Hemet, Lake Elsinore, Moreno Valley, Murrieta, Norco, Perris, Riverside, and San Jacinto (hereinafter the "Co-Permittees", and collectively with the Principal Permittee referred to as the "Permittees"), jointly submitted a permit renewal application, a Report of Waste Discharge (the "2007 ROWD"), to renew the NPDES permit for the Santa Ana River watershed (the "Region") within Riverside County dealing with Urban Runoff (see Appendix 4). Subsequently, the cities of Menifee and Wildomar also signed letters of intent to be covered under this MS4 Permit. The Permit Area (see Appendix 4) is shown in Appendix 1 and includes the urban areas and those portions of agriculture and open space as shown on Appendix 1 that convert to industrial, commercial, or residential use during the term of this Order.

4. To more effectively carry out the requirements of this Order, the Permittees have agreed that the RCFC&WCD will continue as the Principal Permittee and the County and the incorporated cities will continue as the Co-Permittees.

5. The Permittees submitted a revised Drainage Area Management Plan ("2007 DAMP" as defined in Appendix 4, Glossary) as contained in Appendix B of the 2007 ROWD. The proposed DAMP identifies programs and policies, including best management practices (BMPs), to achieve water quality standards in the Receiving Waters. These BMPs can be organized into two categories: BMPs for existing facilities and BMPs for New Development. Both categories include regulatory activities, public education programs, waste management, and operations and maintenance activities. The Permittees currently implement the 2006 DAMP. With the adoption of this Order, the Permittees are required to implement the 2007 DAMP. The DAMP is a dynamic document that defines the MEP standard (see discussion of this term in the Glossary, Appendix 4) for the Permittee activities and is incorporated by reference as an enforceable element of this Order.

6. This Order requires the Permittees to revise the DAMP and associated documents to incorporate new permit requirements which include recommendations from the 2007 ROWD. Future modifications of the DAMP, once approved by the Regional Board Executive Officer[3], are also enforceable elements of this Order.

7. During the Third Term Permit, Regional Board staff conducted an evaluation of each of the Permittees' Urban Runoff programs. This evaluation indicated that most of the Permittees lacked proper documentation of procedures and policies for implementation of various elements of their Urban Runoff program. This Order requires each Permittee to develop a Local Implementation Plan (LIP) that documents its internal procedures for implementation of the various program elements described in the DAMP and this Order.

8. On July 13, 1990, the Regional Board adopted the first term Riverside County MS4 permit, Order No. 90-104 (NPDES No. CA 8000192). On March 8, 1996, the Regional Board renewed Order No. 90-104 by adopting the second term Riverside County MS4 permit, Order No. 96-30 (NPDES No. CAS618033). On October 25, 2002, the Regional Board renewed Order No. 96-30 by adopting the third term MS4 permit, Order No. R8-2002-0011.

[3] The Executive Officer shall provide members of the public with notice and at least a 30-day comment opportunity for all documents submitted in accordance with this Order. If the Executive Officer, after considering timely submitted comments, concludes that the document is adequate or adequate with specified changes, the Executive Officer may approve the document or present it to the Board for its consideration at a regularly scheduled and noticed meeting. If there are significant issues that cannot be resolved by the Executive Officer, the document will be presented to the Board for its consideration at a regularly scheduled meeting.

9. This Order renews Order No. R8-2002-0011 (NPDES No. CAS618033), and regulates discharges of Urban Runoff from the MS4 within the Permit Area in Riverside County. This Order is the fourth term permit and is intended to regulate the discharge of Pollutants in Urban Runoff from anthropogenic (generated from non-agricultural human activities) sources under the jurisdiction of and/or maintenance responsibility of the Permittees and is not intended to address background or naturally occurring Pollutants or flows.

10. The Santa Ana River Basin is the major watershed within this Region. The Regional Board and the Permittees recognize the importance of watershed management initiatives and regional planning and coordination in the development and implementation of programs and policies related to water quality protection.

11. A number of regional and watershed-wide efforts are underway in which the Permittees are active participants. The Regional Board also recognizes that, in certain cases, diversion of funds targeted for certain monitoring programs to regional monitoring programs may be necessary. The Executive Officer is authorized to approve, after proper public notification and consideration of all comments received, the watershed management initiatives and regional planning and coordination programs and regional monitoring programs.

12. The Permittees are required to submit all documents, where appropriate, in an electronic format. All such documents will be posted at the Regional Board's website and all interested parties will be notified. In addition, the website will include the administrative and civil procedures for appealing any decision made by the Executive Officer. Some Urban Runoff issues, such as monitoring, public education, and training can be more effectively addressed on a regional or statewide basis thereby increasing program consistency and efficiency. This Order encourages continued participation in such programs and policies.

B. LEGAL AUTHORITIES

1. This Order Is issued pursuant to Section 402 of the federal Clean Water Act, the Porter-Cologne Water Quality Control Act (Division 7 of the Water Code, commencing with Section 13000), applicable State and federal regulations, all applicable provisions of statewide Water Quality Control Plans and Policies adopted by the State Water Resources Control Board (State Board), the Water Quality Control Plan for the Santa Ana River Basin adopted by the Regional Board (Basin Plan), the California Toxics Rule (CTR), and the California Toxics Rule Implementation Plan. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4, Division 7 of the Water Code (commencing with Section 13260).

2. This Order is consistent with the following precedential Orders adopted by the State Water Resources Control Board (State Board) addressing municipal storm

water NPDES Permits: Order 99-05-DWQ (Petition of Environmental Health Coalition/Receiving Water Limitation Language for Municipal Storm Water Permits), Order WQ-2000-11 (Petitions Bellflower, City of Arcadia, Western States Petroleum Association, Review of RWQCB and Its Executive Officer Pursuant to Order 96-054, Permit for Municipal Storm Water and Urban Run-Off Discharges within Los Angeles County), Order WQ 2001-15 (In the Matter of the Petitions of Building Industry Association of San Diego County and Western States Petroleum Association), and Order WQO 2002-0014 (Petitions of Aliso Viejo, et al/Order to stay provision F.5.f of the permit and part of last sentence of Finding 26, permit issued by San Diego Regional Board).

3. Consistent with the State Board's orders, this Order requires the Permittees to comply with the applicable water quality standards, which is to be achieved through an iterative approach requiring the implementation of increasingly more effective BMPs until water quality standards are not impaired by Urban Runoff. All MS4 permits issued in California specify certain minimum control measures and incorporate an iterative process that requires increasingly more effective control measures if the water quality standards are not met.

4. The federal Clean Water Act established a national policy designed to help maintain and restore the physical, chemical and biological integrity of the nation's waters. In 1972, the CWA established the NPDES permit program to regulate the discharge of Pollutants from "point sources" to waters of the nation or Waters of the U.S. (the receiving waters and as defined in Appendix 4, Glossary). From 1972 to 1987, the main focus of the NPDES program was to regulate conventional Pollutant sources such as sewage treatment plants and industrial facilities. As a result, on a nationwide basis, non-point sources, including agricultural runoff and Urban Runoff, now contribute a larger portion of many kinds of Pollutants than the more thoroughly regulated sewage treatment plants and industrial facilities.

5. Studies conducted by the USEPA, the states, counties, cities, flood control districts and other entities dealing with Urban Runoff indicate that the following are major sources of Urban Runoff pollution nationwide:

   a. Industrial sites where appropriate pollution prevention and best management practices (BMPs as defined in Appendix 4, Glossary) are not implemented;

   b. Construction sites where erosion and sediment controls and BMPs are not implemented; and,

   c. Runoff from urbanized areas.

6. The 1987 amendments to the CWA added Section 402(p) that required the USEPA to develop permitting regulations for storm water discharges from MS4s and from industrial facilities, including construction sites. The USEPA promulgated the final

Phase I storm water regulations on November 16, 1990. Neither the 1987 amendments to the CWA nor the Phase I storm water regulations (40 CFR Part 122) have been amended since their effective dates.

7. Prior to the USEPA's promulgation of the final storm water regulations, three counties (Orange, Riverside, and San Bernardino) and their incorporated cities located within the Regional Board's jurisdiction requested area-wide NPDES MS4 permits. These area-wide MS4 NPDES permits are:

   a. Orange County, NPDES No. CAS 618030

   b. Riverside County, NPDES No. CAS 618033

   c. San Bernardino County, NPDES No. CAS 618036

8. Consistent with the CWA and the USEPA regulations promulgated pursuant thereto, the State Board and the Regional Board have adopted a number of permits to address Pollution from the sources identified in Finding 5, above. Industrial activities (as defined in 40 CFR 122.26(b)(14)) including construction activities on one or more acres are to be covered under one of the following permits and those individuals or entities that engage in such activities are required to secure permission to engage in such identified activities pursuant to the provisions of one of the following permits:

   a. State Board Order No. 97-03-DWQ, for storm water runoff from industrial activities (NPDES No. CAS000001), (the "General Industrial Activities Storm Water Permit").

   b. State Board Order No. 99-08-DWQ, for storm water runoff from construction activities (NPDES No. CAS000002), (the "General Construction Activity Storm Water Permit"). Order No. 99-08- DWQ was amended by State Board Resolution No. 2001-046 on April 26, 2001, to incorporate monitoring provisions as directed by the Superior Court, County of Sacramento. This Order is in the process of being renewed.

   c. State Board Order No. 99-06-DWQ (NPDES No. CAS000003) for storm water runoff from facilities (including freeways and highways) owned and/or operated by the California Department of Transportation ("Caltrans").

   d. State Board Order No. 2003-0007-DWQ, for discharges of storm water runoff associated with small linear underground/overhead construction projects (NPDES No. CAS000005), (the "General Permit-Small Linear Underground Projects). This State Board Order may be merged into the General Construction Activity Storm Water Permit upon its renewal.

e. The Regional Board also issues individual storm water permits for certain industrial facilities within the Santa Ana River watershed. Currently there is only one industrial storm water NPDES permit that has been issued by the Regional Board for a facility (March Air Reserve Base) located within the Permit Area. Additionally, the Regional Board has issued NPDES permits for a number of facilities that discharge process wastewater and storm water; storm water discharge requirements are included in such a facility's NPDES permit.

9. Section 402(p) of the CWA establishes two different performance standards for storm water discharges. NPDES MS4 permits require controls to reduce the discharge of Pollutants to the MEP. NPDES permits issued for industrial storm water discharges (including construction activities) must meet Best Available Technology ("BAT") and Best Conventional Pollutant Control Technology ("BCT") standards. The CWA and the USEPA regulations allow each state the flexibility to decide what constitutes the MEP.

10. This Order does not constitute an unfunded mandate subject to subvention under Article XIII.B, Section (6) of the California Constitution for several reasons, including the following:

    a. This Order implements federally mandated requirements under Clean Water Act Section 402(p)(3)(B). (33 USC § 1342(p)(3)(B)).

    b. The Permittees' obligation under this order are similar to, and in many respects less stringent than, the obligations of non-governmental dischargers who are issued NPDES permits for storm water discharges.

    c. The Permittees have the authority to levy service charges, fees, or assessments to pay for compliance with this Order[4].

    d. The Permittees requested permit coverage in lieu of compliance with the complete prohibition against the discharge of Pollutants contained in federal Clean Water Act Section 301, subdivision (a). (33 USC § 1311(a)).

11. Section 13225 of the California Water Code identifies the Regional Board as being the enforcement authority for NPDES permits, including the Industrial General Permit, the Construction General Permit, and the General Permit-Small Linear Underground Projects, which are collectively referred to as the "Storm Water General Permits." However, in many areas, the industrial and construction sites discharge directly into MS4 facilities owned and operated by the Permittees. These industrial and construction sites are also regulated under local ordinances and regulations. The Permittees and Regional Board staff work together to avoid

[4] Voter approval may be required for new tax levies.

duplicative efforts in regulating these facilities. As part of this coordination, the Permittees have been notifying Regional Board staff when they observe, during their routine activities, conditions that result in a threat or potential threat to water quality, or when a required industrial facility or construction activity fails to obtain coverage under the appropriate General Storm Water Permit.

12. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code Sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. Sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the Beneficial Uses of waters of the U.S.. The Permittees are responsible for meeting all requirements of the applicable Endangered Species Act.

13. The Permittees may petition the Regional Board to issue a separate NPDES permit to any discharger of Non-storm Water into MS4 facilities that they own or operate.

14. The Regional Board has considered anti-degradation requirements, pursuant to 40 CFR 131.12 and State Board Resolution No. 68-16, for this discharge. The Regional Board finds that the Urban Runoff regulated under this Order is consistent with the federal and state anti-degradation requirements and a complete anti-degradation analysis is not necessary. This Order requires the continued implementation of programs and policies to reduce the discharge of Pollutants in Urban Runoff. This Order includes additional requirements to control the discharge of pollutants in Urban Runoff from "Significant Redevelopment," and "New Development," as defined in Finding II.G. and Section XI of this Order.

C. RATIONALE FOR REQUIREMENTS

1. The Regional Board developed the requirements in this Order based on information submitted as part of the 2007 ROWD, the 2007 DAMP, monitoring and reporting data, program audits, and other available information and consistent with the CWA, CWC and regulations adopted thereunder.

2. The Fact Sheet (Appendix 7) which contains additional background information and rationale for requirements specified in this Order is hereby incorporated into this Order and constitutes part of the Findings for this Order. Appendices 1 through 6 are also incorporated into this Order.

D. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

1. Under Water Code Section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code Sections 21100 -21177 (*County of Los Angeles v. California State Water Resources Control Board* [2006] 142 Cal Appl. 4th 985, mod. [Nov. 6, 2006, B184034] 50 Cal. Rptr 3rd 619, 632-636). This action also involves the re-issuance of Waste Discharge Requirements for existing facilities and as such, is exempt from the provisions of California Environmental Quality Act (commencing with Section 21100) in that the activity is exempt pursuant to Title 14 of the California Code of Regulations Section 15301.

2. Compliance with this Order and the DAMP does not necessarily constitute mitigation that is sufficiently specific to satisfy the requirements of CEQA with regards to projects. The intent of the Drainage Area Management Plan/Water Quality Management Plan (DAMP/WQMP), Storm Water Pollution Prevention Plan (SWPPP) and other programs and policies incorporated into this order is to minimize the impacts from a specific project to a level that is below significance as defined in CEQA.

E. DISCHARGE CHARACTERISTICS

1. This Order regulates Urban Runoff from areas under the jurisdiction of the Permittees. The term Urban Runoff as used in this Order includes storm water runoff, snowmelt runoff and surface runoff and drainage as defined in Appendix 4.
2. Pollutants in Urban Runoff can threaten and adversely affect human health and the environment. Human illnesses have been clearly linked to recreating near storm drains flowing into coastal waters[5]. Also, Pollutants in Urban Runoff can bioaccumulate in receiving waters in the tissues of invertebrates and fish and eventually consumed by humans and other animals.
3. Urban Runoff can carry Pollutants described in the Fact Sheet to rivers, streams, and lakes within the Permit Area (collectively the "Receiving Waters"). In addition, although infrequently, Urban Runoff from the Permit Area can carry these Pollutants to other receiving waters such as the Pacific Ocean.
4. Management of dry weather discharges resulting from urbanization provides an opportunity to promote water conservation as well as address water quality. This Order (Sections XI.B.3 and XI.E.2.) requires the Permittees to promote implementation of BMPs for water conservation.
5. The Co-Permittees discharge Urban Runoff into lakes, drinking water reservoirs, rivers, streams, creeks, and tributaries thereto within the Upper Santa Ana River, Middle Santa Ana River, and San Jacinto hydrologic units within the Santa Ana Region, as shown in Tables 3a and 3b. Some of the receiving water bodies have

[5] The Santa Monica Bay Restoration Project, Epidemiology Study, 1996.

been designated as impaired by the Regional Board and the USEPA pursuant to CWA Section 303(d).

Table 3a – Receiving Waterbodies and Municipal Dischargers:

	Upper Santa Ana						San Jacinto							
Municipality	**Temescal Creek**	**San Timoteo Wash**	**Little San Gorgonio**	**Santa Ana River, Reach 3**	**Santa Ana River, Reach 4**	**Cucamonga Creek**	**San Jacinto River reaches 1-4**	**Lake Elsinore**	**Canyon Lake**	**Strawberry Creek**	**Lake Hemet**	**Salt Creek**	**Poppet Creek**	**Indian Creek**	**Bautista Creek**
RCFC&WCD	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Beaumont		◆	◆	⋓	⋓		◆	⋓		◆					
Calimesa		◆	⋓	⋓	⋓		◆	⋓	◆	◆					
Canyon Lake	⋓			⋓			⋓	⋓	◆						
Corona	◆			⋓											
County of Riverside (County)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Hemet	⋓			⋓			⋓	⋓	⋓			⋓			
Lake Elsinore	◆			⋓			⋓	◆							
Moreno Valley	⋓			⋓			⋓	⋓	⋓						
Murrieta	⋓			⋓				⋓							
Norco	⋓			◆											
Perris	⋓			⋓			◆	⋓	⋓			⋓			
Riverside	⋓			◆	◆			⋓							
San Jacinto							◆	⋓	⋓						

◆ Direct Discharge
⋓ Indirect Discharge

Intentionally Blank

Table 3b. Beneficial Uses and 2006 CWA Section 303(d) Impaired Waters

Watershed Management Areas in Riverside County	Hydraulic Unit	Beneficial Uses
Upper Santa Ana River		
Santa Ana River, Reach 3,	801.21, 801.25, 801.27,	AGR, GWR, REC1, REC2, WARM, WILD, RARE
Santa Ana River, Reach 4	801.27, 801.44	GWR, REC1, REC2, WARM, WILD,
Temescal Creek – Reach 1A	801.25	AGR, IND, GWR, REC1, REC2, WARM, WILD, RARE, SPWN
Temescal Creek – Reach 1B	801.25	REC1, REC2, LWARM, WILD
Temescal Creek – Reach 2	801.32, 801.25	INTERMITTENT - AGR, IND, GWR, REC1, REC2, WARM, WILD
Temescal Creek – Reach 3 **See Lee Lake**		
Temescal Creek – Reach 4	801.34	RARE, INTERMITTENT - AGR, GWR, REC1, REC2, WARM, WILD
Temescal Creek – Reach 5	801.35	AGR, GWR, REC1, REC2, WARM, WILD, RARE
Temescal Creek – Reach 6	801.35	INTERMITTENT - GWR, REC1, REC2, WARM, WILD
Coldwater Canyon Creek	801.32	MUN, AGR, GWR, REC1, REC2, WARM, WILD
Bedford Canyon Creek	801.32	INTERMITTENT - GWR, REC1, REC2, WARM, WILD
Dawson Canyon Creek	801.32	MUN, GWR, REC1, REC2, WARM, WILD
Day Creek	801.21	INTERMITTENT - MUN,PROC, GWR, REC1, REC2, COLD, WILD
San Sevaine Creek	801.21	INTERMITTENT - MUN, GWR, REC1, REC2, COLD, WILD
San Timoteo Wash Reaches 3 & 4	801.62	INTERMITTENT - AGR, GWR, REC1, REC2, WARM, WILD,
Little San Gorgonio Creek & Tributaries	801.62, 801.63, 801.69	MUN, GWR, GWR, REC1, REC2, COLD, WILD,
Sunnyslope Channel	801.27,	MUN, REC1, REC2, WARM, WILD, SPWN
Tequesquite Arroyo (Sycamore Creek)	801.27,	GWR, REC1, REC2, WARM, WILD, SPWN
Chino Basin/ Middle Santa Ana		
Cucamonga Creek – Reach 1	801.21	GWR, REC1, REC2, LWARM, WILD
- Santa Ana River, Reach 3	801.21, 801.25, 801.27,	AGR, GWR, REC1, REC2, WARM, WILD, RARE

Watershed Management Areas in Riverside County	Hydraulic Unit	Beneficial Uses
San Jacinto San Jacinto River reaches 1 and 6	802.31, 802.32 & 802.21	INTERMITTENT - MUN, AGR, GWR, REC1, REC2, WARM, WILD
San Jacinto San Jacinto River reaches 3-5	802.11, 802.14, 802.21,	INTERMITTENT - AGR, GWR, REC1, REC2, WARM, WILD
San Jacinto San Jacinto River reach 2 **See Canyon Lake**		
San Jacinto San Jacinto River reach 7	802.21	MUN, AGR, GWR, REC1, REC2, WARM, WILD
- Bautista Creek	802.21, 802.23	MUN, AGR, GWR, REC1, REC2, COLD, WILD,
Strawberry Creek	802.21	MUN, AGR, GWR, REC1, REC2, COLD, W ILD
Fuller Mill Creek	802.22	MUN, AGR, GWR, REC1, REC2, COLD, WILD
Stone Creek	802.21	MUN, AGR, GWR, REC1, REC2, COLD, W ILD
Salt Creek	802.12	INTERMITTENT - REC1, REC2, WARM, WILD
Logan, Black Mtn, Juaro Canyon, Indian, Hurkey, Poppet and Protrero Creeks, and other Tributaries to these Creeks	802.21, 802.22	INTERMITTENT - MUN, AGR, GWR, REC1, REC2, WARM, WILD,
Lakes		
Lake Elsinore	802.31	REC1, REC2, WARM, WILD
Canyon Lake	802.11	MUN, AGR, GWR, REC1, REC2, WARM, WILD
Lake Hemet	802.22	MUN, AGR, GWR, POW, REC1, REC2, WARM, COLD, WILD, SPWN
Lake Fulmor	802.21	MUN, AGR, REC1, REC2, WARM, COLD, WILD
Lake Perris	802.11	MUN, AGR, IND, PROC, GWR, REC1, REC2, WARM, COLD, WILD,
Lake Evans	801.27	REC1, REC2, WARM, COLD, WILD
Lake Mathews	801.33	MUN, AGR, IND, PROC, GWR, REC1, REC2, WARM, WILD, RARE
Lee Lake	801.34	AGR, IND, GWR, REC1, REC2, WARM, WILD
Mockingbird Reservoir	801.26	AGR, REC1, REC2, WARM, WILD

AGR: Agricultural Supply; MUN: Municipal and Domestic Supply; GWR: Groundwater Recharge; IND – Industrial Service Supply, POW – Hydropower generation, REC1: Water Contact Recreation; REC2: Non-Contact Water Recreation; WARM: Warm Freshwater Habitat; LWARM: Limited Warm Freshwater Habitat, COLD - Cold freshwater habitat, WILD: Wildlife Habitat, RARE – Rare threatened or endangered species. SPWN – Spawning, reproduction and development waters.

6. Urban Runoff includes those discharges from residential, commercial, industrial, and construction areas within the Permit Area and excludes discharges from feedlots, dairies, and farms. Urban Runoff consists of storm water and "authorized non-storm water" (see Section V) surface runoff from drainage sub-areas with various, often mixed, land uses within all of the hydrologic drainage areas that discharge into the Receiving Waters. In addition to Urban Runoff, the MS4 regulated by this Order receives flows from agricultural activities, open space, state and federal properties and other non-urban land uses not under the control of the Permittees. The quality of the discharges from the MS4 varies considerably and is affected by, among other things, past and present land use activities, basin hydrology, geography and geology, season, the frequency and duration of storm events, and the presence of past or present illegal discharges and allowed discharges and illicit connections.

7. The Permittees lack legal jurisdiction over storm water and other discharges into their MS4 facilities from agricultural activities, California and federal facilities, utilities and special districts, Native American tribal lands, non-Permittee wastewater management agencies and other point and non-point source discharges otherwise permitted by or under the jurisdiction of the Regional Board. To the extent that the Permittees authorize the connection of these discharges into their MS4s, this Order requires the Permittees to ensure that such facilities and/or discharges reduce Pollutants consistent with the MEP standard through encroachment permits or other mechanisms to control the contribution of Pollutants into the MS4. This could include notification of State's requirements and/or Permittees' ordinances, WQMP requirements for post-construction BMPs, requirements of this Order and the strategies in the DAMP/Watershed Action Plan. Certain activities that generate Pollutants present in Urban Runoff may be beyond the ability of the Permittees to control. Examples of these include operation of internal combustion engines, atmospheric deposition, residues from lawful application of pesticides, nutrient runoff from agricultural activities, bacteria from wildlife (including birds and feral dogs and cats) and leaching of naturally occurring minerals from local geography.

8. Pathogens (from sanitary sewer overflows, septic system leaks, and spills and leaks from portable toilets, pets, wildlife, and human activities) can impact water contact recreation and non-contact water recreation. Floatables (from trash) are an aesthetic nuisance and can be a substrate for algae and insect vectors. Oil and grease can coat birds and aquatic organisms, adversely affecting respiration and/or thermoregulation. Other petroleum hydrocarbon components may cause toxicity (as defined in Appendix 4, Glossary) to aquatic organisms and may impact human health. Suspended and settleable solids (from sediment, trash, and industrial activities) may be deleterious to benthic organisms and may cause anaerobic conditions to form. Sediments and other suspended particulates may cause turbidity, clog fish gills and interfere with respiration in aquatic fauna. They may also screen out light, hindering photosynthesis and normal aquatic plant growth

and development. However, it is recognized that storm flows from non-urbanized areas such as national forest, state parks, wilderness, and agriculture, as shown on Appendix 1, naturally exhibit high levels of suspended solids due to climate, hydrology, geology and geography.[6] Toxic substances (from pesticides, petroleum products, metals, and industrial wastes (as defined in Appendix 4, Glossary) can cause acute and/or chronic toxicity, and can bioaccumulate in organisms to levels that may be harmful to human health. Nutrients (from fertilizer use, fire fighting chemicals, decaying plants, confined animal facilities, pets, and wildlife) may cause excessive algal blooms. These blooms may lead to problems with taste, odor, color and increased turbidity, and may depress the dissolved oxygen content, leading to fish kills.

9. Bacteria and nutrients are the Pollutants of Concern for a majority of the inland waters that are listed under the 303(d) list of impaired waterbodies or an adopted TMDL. This Order requires the Permittees to identify urban sources of bacteria and nutrients to their MS4s and to control those Pollutant sources.

10. Recent information[7] shows that plastic wastes and materials released to surface water bodies can harm aquatic species by entanglement or ingestion. This Order requires the Permittees to consider facilities that handle nurdles[8] as a high priority site for inspection, and outreach. Nurdles are a major contributor to marine debris. During a three month study of Orange County researchers found them to be the most common beach contaminant[9]. Nurdles comprised roughly 98% of the beach debris collected in a 2001 Orange County study.

11. The Permittees' water quality monitoring data submitted to date document a number of violations of Basin Plan water quality objectives for various urban runoff-related pollutants (fecal coliform bacteria, nutrients, total suspended solids, turbidity, metals, etc.) at various watershed monitoring stations.

12. This Order includes requirements for control of dry weather flows that may cause an exceedance of water quality objectives in Receiving Waters for TDS or total inorganic nitrogen (TIN).

---

[6] Riverside County Flood Control and Water Conservation District's "Hydrology Manual," dated April 1978 and page II-4 of "Santa Ana River, Design Memorandum No. 1, Phase II GDM on the Santa Ana River Mainstem, including Santiago Creek, Volume 2, Prado Dam." dated August 1988 and D.I. Inman & S.A. Jenkins "Climate Change and the Episodicity of Sediment Flux in Small California Rivers," Journal of Geology, Volume 107, pp. 251-270, 1999.

[7] http://www.bestlifeonline.com/cms/publish/health-fitness/Our_oceans_are_turning_into_plastic_are_we_2_printer.shtml,

[8] A nurdle is a plastic pellet, also known as pre-production plastic pellet or plastic resin pellet.

[9] Moore, Charles (2002). "A comparison of neustonic plastic and zooplankton abundance in Southern California's coastal waters and elsewhere in the North Pacific". *Algalita Marine Research Foundation*. http://www.mindfully.org/Plastic/Ocean/Marine-Debris-Panel30oct02.htm.

13. The Permittees' 2003-2004, 2004-2005, 2005-2006, 2006-2007 and 2007-2008 Annual reports indicate exceedances of water quality standards for each core monitoring station as follows:

    a. Corona Storm Drain (40) - Six samples were collected and analyzed for fecal coliforms. Three samples were collected in the dry season and three during wet weather events. All samples analyzed exceeded bacteria (as fecal coliform) Basin Plan Objectives with a maximum value of 160,000 MPN fecal coliforms. Boron analyses exceeded Basin Plan Objectives of 0.75 mg/L in one out of eighteen samples collected (0.78 mg/L). Six samples were collected and analyzed for TDS in 2003-2004. All samples were below the Santa Ana River Reach 3 Basin Plan Objectives of 700 mg/L TDS and only one of eighteen samples exceeded the 10 mg/L total nitrogen objective.

    b. Sunnymead Channel (316) - Three samples were collected during wet weather events and analyzed for fecal coliforms in this time frame. All exceeded bacteria Basin Plan objectives of 200 MPN fecal coliforms. Two samples were collected during wet weather events and analyzed for TDS and were below the Basin Plan Objective of 700 mg/L for Canyon Lake. Total nitrogen values in all ten samples collected during wet weather events were below the Basin Plan Objective of 8 mg/L.

    c. Hemet Channel (318) - All four samples collected during this time frame exceeded the bacteria Basin Plan Objective of 200 MPN. As Salt Creek does not have numeric objectives for TDS, the Receiving Water for Salt Creek is Canyon Lake with an objective of 700 mg/L TDS. All eighteen samples collected during wet weather events and analyzed for TDS were below the Canyon Lake Basin Plan Objective. Total nitrogen values in all nine samples collected during wet weather events were below the Basin Plan Objective of 8 mg/L.

    d. Magnolia Center (364) – Eleven out of thirteen samples collected exceeded the Basin Plan Objective for fecal coliform (200 MPN). Two (both collected during wet weather events) out of thirty-four samples identified total nitrogen concentrations in excess of the 10 mg/L Basin Plan Objective. The maximum concentration measured was 13 mg/L. Basin Plan Objective of 700 mg/L TDS were exceeded in six out of twenty-one samples analyzed. The maximum TDS concentration was 1000 mg/L TDS. The maximum TDS concentration was 1,000 mg/L.

e. University Wash Channel (702) – All three samples collected during this time frame exceeded the fecal coliform Basin Plan Objective of 200 MPN. The maximum concentration was greater than 13,000 MPN. One (11 mg/L) out of sixteen samples analyzed for total nitrogen was above the Santa Ana River Reach 4 Basin Plan Objective of 10 mg/L. Ten samples analyzed for TDS were below Basin Plan objective of 550 mg/L.

f. North Norco Channel (707) – Three out of four samples analyzed for bacterial indicators exceeded bacteria Basin Plan Objective of 200 MPN fecal coliform. Three out of four samples analyzed for TDS were above the Santa Ana River-Reach 3 Basin Plan Objective of 700 mg/L. One out of ten samples analyzed for total nitrogen exceeded the Basin Plan Objective of 10 mg/L for total nitrogen.

g. Perris Line J Channel (752) – All four samples analyzed exceeded bacterial indicator Basin Plan Objective the highest value was 13,000 MPN fecal coliform. Two of four samples analyzed for TDS exceeded the Basin Plan Objective of 700 mg/L for Canyon Lake. One out of twelve samples analyzed exceeded the Basin Plan Objective of 8 mg/L for total nitrogen.

14. The Permittees are participating in several studies in conjunction with the Storm Water Monitoring Coalition (SMC), Storm Water Quality Standards Task Force, the Middle Santa Ana River TMDL Task Force and Southern California Coastal Water Research Project (SCCWRP) to address the elevated fecal indicator bacteria levels. Also, the Permittees are anticipating that the use of fecal indicator bacteria will be changed to e. coli and the reclassification of REC uses for several urban channels in the near future. However, e. coli data still indicates Basin Plan Objectives exceedances that will need to be addressed as part of the TMDL. Also, there is an investigation has been initiated to determine the source of high pH levels that have been identified recently in Temescal Channel.

15. The above monitoring results, the 303(d) list of Impaired Waterbodies and the approved TMDLs indicate that bacterial contamination is one of the persistent problems in Urban Runoff. The goal of the TMDL implementation plans is to address this problem. The Permittees are expected to meet the WLAs in the approved TMDLs. It should be noted, however, that the work of the Storm Water Quality Standards Task Force is likely to result in changes to Recreational Water Quality Objectives which would suspend recreational uses during high flow events. Further, some MS4 facilities may be recategorized as REC 2 or REC X under a proposed use attainability assessment (UAA) process. These changes will likely allow the Permittees to focus their resources on bacterial contamination that is

affecting recreational swimming areas used during the dry season as the highest priority.

F. CWA SECTION 303(D) LISTED WATERBODIES AND TMDLS

1. Water quality assessment conducted by Regional Board staff has identified a number of Beneficial Use impairments due, in part, to Urban Runoff. Section 305(b) of the CWA requires the USEPA and each state that has been delegated NPDES permitting authority to routinely monitor and assess the quality of waters of their respective regions. If this assessment indicates that Beneficial Uses are not met, then that waterbody must be listed under Section 303(d) of the CWA as an Impaired Waterbody.

2. Based on the Regional Board's 2006[10] water quality assessment a number of water bodies within the Permit Area are listed (see Table 4, below) as impaired pursuant to Section 303(d).

Table 4 - Impaired Waterbodies

Waterbody	Pollutant	Potential Sources	Proposed TMDL Completion
Santa Ana River, Reach 3,	Pathogens	Non-point Source	Approved 2007
Chino Creek and Cucamonga/Mill Creek	Pathogens	Non-point Source	Approved 2007
	Nutrients	Non-point Source	2011 (In Progress)
Canyon Lake	Nutrients	Non-point Source	Approved 2005
	Pathogens	Non-point Source	Listing under evaluation
Lake Elsinore	Nutrients	Non-point Source	Approved 2005
	Unknown Toxicity PCBs	Unknown Unknown Non-point Source	2007 2019
Lake Fulmor	Pathogens	Unknown Non-point Source	2019
Santa Ana River, Reach 4	Pathogens	Non-point Source	2019

[10] On April 24, 2009, the Regional Board adopted Resolution No. R8-2009-0032 approving the Clean Water Act Section 305(b) Integrated Report/Clean Water Act Section 303(d) List of Impaired Waterbodies. When the revised list is approved by the State Board and the USEPA, the 2006 list will be updated.

3. Federal regulations require that a total maximum daily load (TMDL) be established for each 303(d) listed waterbody for each of the Pollutants causing impairment. The TMDL is the total amount of a Pollutant that can be discharged to a subject waterbody, while still enabling the waterbody to attain water quality standards in the receiving water. Attaining water quality standards means that the receiving waterbody's water quality objectives are met and its Beneficial Uses are protected. The TMDL is the sum of the individual waste load allocations (WLAs) for point source inputs, load allocations for non-point source inputs and natural background, and a margin of safety. The TMDLs are one of the bases for limitations established in Waste Discharge Requirements.

4. The Basin Plan amendment incorporating the Middle Santa Ana River Watershed Bacterial Indicator TMDLs (MSAR TMDL) was approved by the Regional Board on August 26, 2005 (Resolution No. R8-2005-0001), by the State Board on May 15, 2006, by the state's Office of Administrative Law on September 1, 2006, and by the USEPA on May 16, 2007.

5. The MSAR TMDL established limits for bacterial source indicators for Santa Ana River (Reach 3), Chino Creek (Reaches 1 and 2), Prado Park Lake, Mill Creek (Prado Area), and Cucamonga Creek (Reach 1). The allocations apply to Middle Santa Ana River Watershed Urban Dischargers as a group. The MSAR TMDLs Implementation Plan identifies three sub-watersheds in Riverside County that drain to the Santa Ana River, Reach 3: 1) Riverside Watershed - Contributes surface drainage generally westward from the City of Riverside to the Santa Ana River; 2) Temescal Canyon Watershed - Contributes surface drainage generally northward to Temescal Creek and then to the Santa Ana River; and 3) Chino Basin - The southeastern portion of the Chino Basin drains generally south to the Santa Ana River in Riverside County.

6. The MSAR TMDLs specifies WLAs for Urban Runoff, and discharges from concentrated animal feeding operations. LAs are specified for runoff from other types of agriculture and from natural sources (open space/undeveloped forest land). WLAs and LAs are specified for both dry season discharges and wet season discharges, with separate compliance dates.

7. The implementation plan for the MSAR TMDL identified a number of tasks for the responsible parties that include some of the Permittees and non-permittees. The responsible parties established a TMDL Task Force to jointly implement the TMDL implementation plan (see Table 5, below, for a list of task force members). Pursuant to Task 3 of the MSAR TMDL, the TMDL Task Force submitted a monitoring program that the Regional Board approved on June 29, 2007 (Resolution No. R8-2007-0046).

Table 5 - Middle Santa Ana River Bacterial Indicator TMDL Task Force

MS4 Permittees	Non-MS4 Permittees
Corona, City of	Santa Ana Watershed Project Authority
Norco, City of	US Department of Agriculture
Riverside, City of	US Department of Forest Service
Riverside, County of	
RCFC&WCD,	Region 4 MS4 Permittees - Claremont, and Pomona.
San Bernardino County Flood Control District (representing the county of San Bernardino and the municipalities named in the TMDL)	

8. Pursuant to Task 4 of the MSAR TMDL, on April 18, 2008, the Regional Board approved the Urban Source Evaluation Plan (Resolution No. R8-2008-0044) proposed by the TMDL Task Force. This Order requires the Permittees on the Task Force to continue to implement the approved monitoring program and the Urban Source Evaluation Plan.

9. Within the Permit Area, there are two watershed-wide MSAR TMDL monitoring stations (WW-S1 Santa Ana River Reach 3 @ MWD Crossing and WW-S4 Santa Ana River Reach 3 @ Pedley Avenue). Permittees within the MSAR TMDL area are required to comply with the numeric bacterial indicator targets at these monitoring locations as soon as possible but no later than December 31, 2015 for dry weather conditions (April 1 through October 31, as defined in the TMDL) and no later than December 31, 2025 for wet winter conditions (November 1 through March 31, as defined by the TMDL).

10. On December 20, 2004, the Regional Board adopted Resolution R8-2004-0037 amending the Basin Plan to incorporate the Lake Elsinore and Canyon Lake Nutrient TMDLs. These TMDLs were subsequently approved by the State Board on May 19, 2005, by the Office of Administrative Law on July 26, 2005 and by the USEPA on September 30, 2005. These TMDLs include urban WLAs that are now incorporated into Chapter 5 of the Basin Plan. For both Canyon Lake and Lake Elsinore, the TMDLs specify numeric targets (nitrogen and phosphorus) and response numeric targets (chlorophyll *a*, dissolved oxygen and un-ionized ammonia). The TMDLs also specify nitrogen and phosphorus WLAs (point source discharges) and load allocations (nonpoint source discharges) for each lake. Compliance with the numeric targets and WLAs and LAs is to be achieved as soon as possible but no later than December 31, 2020. The LAs and WLAs are specified as 10-year running average.

11. The nitrogen and phosphorus WLAs and LAs for Canyon Lake are applicable to those discharges tributary to Canyon Lake. The nitrogen and phosphorus WLAs and LAs for Lake Elsinore apply to those areas downstream of Canyon Lake and to overflows from Canyon Lake.

12. The Permittees propose to include in the future ROWDs an:

    h. Evaluation of the effectiveness of BMPs and other control actions implemented; and

    i. Evaluation of the progress towards compliance with the nutrient WLA allocation for Urban Runoff.

13. TMDL implementation plans for each TMDL assign responsibilities to specific MS4 dischargers to identify sources of impairment, to propose BMPs to address those sources, and to monitor, evaluate and revise BMPs based on monitoring results. Specific implementation plan tasks are described in Chapter 5 of the Basin Plan and are assigned to one or more of the Permittees. Requirements of the TMDL implementation plan tasks are incorporated into this Order and were proposed for inclusion in Chapter 13 of the DAMP (see 2007 ROWD). Several of these tasks are also jointly assigned to non-Permittee stakeholders. The Permittees have established TMDL Task Forces to jointly implement and coordinate those tasks.

14. The Canyon Lake and Lake Elsinore Nutrient TMDL Task Force (also referred to as the San Jacinto Watershed Urban Dischargers) members are tabulated below:

Table 6 - Canyon Lake and Lake Elsinore Nutrient TMDL Task Force

Riverside MS4 Permittees	**Non-Permittees**
Beaumont, City of	California Department of Fish and Game
Canyon Lake, City of	California Department of Transportation (Caltrans),
Hemet, City of	Eastern Municipal Water District
Lake Elsinore, City of	Elsinore Valley Municipal Water District
Moreno Valley, City of	U.S. Air Force (March Air Reserve Base), March Joint Powers Authority,
Murrieta, City of	U.S. Forest Service
Perris, City of	Western Riverside County Agricultural Coalition
San Jacinto, City of	
Riverside, City of	
Riverside, County of	
RCFC&WCD	

15. The cities of Menifee and Wildomar were recently incorporated and are responsible for compliance with the TMDL requirements. They have the option to participate in the TMDL Task Force or comply with the TMDL requirements on their own.

G. NEW DEVELOPMENT/SIGNIFICANT REDEVELOPMENT – WQMP/LIP/LID

1. The California Constitution and Government Code provide the Co-Permittees planning policy powers that mandate that the Co-Permittees review and condition New Development consistent with the Subdivision Map Act, CEQA, and their respective general plans, ordinances, and resolutions to ensure the general public's health and safety. If these constitutional and statutory mandates are not properly implemented and local ordinances and resolutions are not properly enforced, there is a creditable potential that New Development could result in the discharge of Pollutants via Urban Runoff to the Waters of the U.S within the Permit Area.

2. Significant development has taken place in Riverside County in the last decade. These developments have resulted in the urbanization of many areas. Urbanization generally increases Urban Runoff volume and velocity of runoff and the amount of Pollutants in the runoff. As development occurs, natural vegetated pervious ground cover is converted to impervious surfaces such as highways, streets, rooftops and parking lots. Natural vegetated soil can both absorb rainwater and remove Pollutants providing an effective natural purification process. In contrast, impervious surfaces can neither absorb water nor remove Pollutants, and the natural purification characteristics are lost. Additionally, urban development can significantly increase Pollutant loads as the increased population density causes proportionately higher levels of vehicle emissions, vehicle maintenance wastes, municipal sewage wastes, pesticide, household hazardous wastes, pet wastes, trash, and other anthropogenic pollutants.

3. Urbanization can especially threaten environmentally sensitive areas (ESAs) and stream geomorphology. ESAs have a much lower capacity to withstand pollution loads. In essence, development that is ordinarily insignificant in its impact on the environment may in a particular sensitive environment become significant. Designated environmentally sensitive areas include areas listed in the Basin Plan as supporting the "rare, threatened, or endangered species (RARE)", "wildlife habitat (WILD)", "spawning, reproduction, and development (SPWN)", and "preservation of biological habitats of special significance (BIOL)" Beneficial Uses.

4. The high volumes and velocities of storm water discharges from MS4s into natural watercourses can adversely impact aquatic ecosystems and stream habitat and cause stream bank erosion and physical modifications. These changes are collectively termed hydromodification. For the Permit Area, hydromodification especially impact those natural streams in the developing foothills and in other urbanizing portions of the watershed.

5. On October 5, 2000, the State Board adopted Order No. WQ-2000-11, which is a precedential order. Order No. WQ-2000-11 required that Urban Runoff generated by 85th percentile storm events from specific types of development categories be

infiltrated, filtered or treated. The essential elements of this precedential order were incorporated into the third term permit. In accordance with the requirements specified in the third term permit, the Permittees developed a model Water Quality Management Plan (WQMP) and Template.

6. The model WQMP and Template provide a framework to incorporate some of the watershed protection principles into the Permittees' planning, construction and post-construction phases of defined new and redevelopment projects. The model WQMP includes site design (including LID principles), source control and Treatment Control elements to reduce the discharge of pollutants in Urban Runoff. On September 17, 2004, the Regional Board approved the model WQMP and Template. The Permittees are requiring proponents of New Developments and Significant Redevelopments to develop and implement site-specific WQMPs. This Order requires Permittees to continue requiring preliminary project-specific WQMPs as early as possible during the environmental review or planning phase (land use entitlement) and to review and approve final project–specific WQMP that is in substantial conformance with the preliminary project-specific WQMP prior to the issuance of any building or grading permit. This Order also requires Permittees to verify functionality of post-construction BMPs prior to issuance of certificate of occupancy and to track and ensure long term operation and maintenance of those BMPs as per the approved WQMPs.

7. An audit of each of the Pemittees' storm water management program during the third permit term indicated no clear nexus between the watershed protection principles, including low impact development (LID, see Appendix 4) techniques specified in the WQMP and the Permittees' General Plan or related documents such as Development Standards, Zoning Codes, Conditions of Approval and Project Development Guidance. Existing procedures, ordinances, local codes, and development standards may be barriers to implementation of low impact development practices. This Order requires the Permittees to review and revise the Permittees' General Plan, Comprehensive or Master Plan, Municipal/Zoning Codes, Subdivision Ordinances, Project Development Standards, Conditions of Approval or related documents to remove any barriers for implementation of LID techniques and other requirements of this Order.

8. This Order also requires the Permittees to review and enforce Covenants, Conditions and Restrictions (CC&R) or develop other mechanisms to ensure proper long term operation and maintenance of post-construction BMPs.

9. In addition to addressing post-development water quality, the WQMP includes requirements to protect ESAs and address potential hydromodification issues. Section 4.4 of the WQMP requires identification of hydrologic conditions of concern (HCOC). An HCOC exists when a site's hydrologic regime is altered and there are significant impacts on downstream channels and aquatic habitats, alone or in

conjunction with impacts of other projects. Currently, New Development and Significant Re-development projects are required to perform this assessment and incorporate appropriate BMPs to ensure existing hydrologic conditions are maintained. This Order requires the Permittees to implement LID techniques to minimize HCOC.

10. Management of the impacts of urbanization on water quality and stream stability in the Permit Area is more effective if the techniques are implemented at the project site, within the neighborhood and within each municipality based on an overall watershed plan. The Permittees have identified major outfalls (with a pipe diameter of 36 inches or greater or drainage areas draining 50 acres or more) and have submitted maps of existing MS4 facilities. This Order requires the Permittees to expand upon the existing maps to include a map of its lined and unlined channels and streams within the permitted area with the goal of identifying, prioritizing, and developing specific action plans for protecting those segments of streams that are vulnerable to development impacts.

11. This Order further requires the Permittees to integrate existing watershed based planning efforts and develop and implement a Watershed Action Plan that incorporates watershed tools to manage cumulative impacts of development on vulnerable streams, preserve structure and function of streams, and protect source, surface and groundwater quality and water supply in the permitted area. The Watershed Action Plan should integrate hydromodification and water quality management strategies with land use planning policies, ordinances, and plans within each jurisdiction. Existing Permittee watershed planning efforts include the Western Riverside County Multiple Species Habitat Conservation Plan, Special Area Management Plan, Santa Ana and San Jacinto Integrated Regional Watershed Management Plans, Lake Elsinore and Canyon Lake and Middle Santa Ana River TMDL Task Forces, SCCWRP hydromodification sensitivity mapping project, and various regional BMP evaluations being conducted by the Principal Permittee in conjunction with various water districts. The tools should be evaluated, and if necessary, enhanced to provide Permittees with the tools to integrate hydromodification and water quality management strategies with storm water management, conservation and with land use planning policies, ordinances, and plans within each jurisdiction and within the Permit Area.

12. Pending completion of a Watershed Action Plan and implementing tools, management of the impacts of urbanization shall be accomplished on a per project and per jurisdiction basis through jurisdictional implementation of the watershed tools incorporated into the local general plans, ordinances and other requirements and the project-specific WQMPs.

13. Recent studies have indicated that LID[11] is an effective urban storm water management tool that minimizes adverse impacts from urban developments on Urban Runoff quality and quantity. The Southern California Monitoring Coalition (SMC) in collaboration with SMC member Southern California Coastal Water Research Project (SCCWRP) and the California Storm Water Quality Association (CASQA) with funding from the State Water Resources Control Board and CASQA is developing a LID Manual for Southern California. This manual will be incorporated into the CASQA BMP Handbooks. The Permittees are encouraged to utilize the manual as a resource to implement LID techniques.

14. This Order requires the project proponents to first consider preventative and conservation techniques (e.g., preserve and protect natural features to the MEP) prior to considering mitigative techniques (structural treatment, such as infiltration systems). The mitigative measures should be prioritized with the highest priority for BMPs that remove storm water pollutants and reduce runoff volume, such as infiltration, then other BMPs, such as harvesting and re-use, evapotranspiration and bio-treatment should be considered. Consistent with the MEP standard, these LID BMPs must be implemented at the project site. Consideration of "highest and best use" of the discharge should also be considered. For example, Lake Elsinore is evaporating faster than runoff from natural precipitation can recharge it. Requiring infiltration of 85% of runoff events for projects tributary to Lake Elsinore would only exacerbate current water quality problems associated with pollutant concentration due to lake water evaporation. In cases such as this, requiring infiltration of runoff is counterproductive to the overall watershed goals. Project proponents, in these cases, would be allowed to discharge Urban Runoff, provided they used equally effective filtration based BMPs. The Regional Board also recognizes that site conditions, including site soils, contaminant plumes, high groundwater levels, etc., could limit the applicability of infiltration and other LID BMPs at certain project sites. Where LID BMPs are not feasible or appropriate at the project site, more traditional, but equally effective control measures should be implemented. This Order provides for alternatives and in-lieu programs where LID BMPs are infeasible or inappropriate.

15. The USEPA has determined that LID/green infrastructure can be a cost-effective and environmentally preferable approach for the control of storm water pollution and to minimize downstream impacts by limiting the effective impervious area (EIA) of a development. LID and the reduction of impervious areas, may achieve multiple environmental and economic benefits in addition to enhanced water quality and supply, stream and habitat protection, cleaner air, reduced urban temperature, increased energy efficiency and other community benefits such as aesthetics

[11] Low impact development is an approach to land development (or re-development) that works with nature to manage storm water as close to its source as possible by using structural and non-structural best management practices to reduce environmental impacts.

recreation, and wildlife areas. USEPA has reviewed studies[12] that have evaluated relationships between the percentage of EIA and physical degradation of stream channels (also see the SCCWRP study[13]). The limited study conducted by Dr. Richard Horner[14] concluded that a 3% EIA standard for development is feasible in Ventura County. USEPA-Region 9 staff believes that EIA is a reasonable metric for incorporating LID principles into storm water permits and USEPA supports equally effective metrics for compliance determination. This Order incorporates a volume capture metric based on the design volume specified in the WQMP and also includes a metric based on EIA.

16. If not properly designed and maintained, the structural Treatment Control BMPs could create a nuisance and/or habitat for vectors[15] (e.g., mosquitoes and rodents). Third term permit required the Permittees to closely collaborate with the local vector control agencies during the development and implementation of such Treatment Control BMPs The Permittees should continue these collaborative efforts with the vector control agencies to ensure that Treatment Control BMPs do not become a nuisance or a potential source of pollutants. The requirements specified in this Order include identification of responsible agencies for maintaining the Treatment Control BMPs and for providing funding for operation and maintenance.

17. If not properly designed and maintained, groundwater infiltration systems may adversely impact groundwater quality. Restrictions placed on Urban Runoff infiltration in this Order (Section XI.D.16) are based on recommendations provided by the USEPA Risk Reduction Laboratory. The Permittees should work closely with the water districts and water conservation districts to insure groundwater protection.

[12] See Southern California Coastal Water Research Project, "Managing Runoff to Protect Natural Streams: The Latest Developments on Investigation and Management of Hydromodification in California", dated December 30, 2005, Eric Stein and Susan Zaleski and the analysis prepared by Dr. Richard Horner entitled, "Investigation of the Feasibility and Benefits of Low-Impact Site Design Practices ("LID") for Ventura County" submitted to Los Angeles Regional Board by NRDC

[13] Studies conducted by Southern California Coastal Water Research Project (SCCWRP) and others indicate that environmental impacts from developments could be minimized by limiting the effective impervious area.

[14] Dr. Richard Horner, Investigation of the Feasibility and Benefits of Low-Impact Site Design Practices ("LID") for Ventura County, Development (undated)

[15] Managing Mosquitoes in Storm water Treatment Devices, Marco E. Metzger, University of California Davis, Division of Agriculture and Natural Resources, Publication 8125.

H. MUNICIPAL INSPECTION PROGRAMS

1. Each Co-Permittee conducts inspections of those construction sites for which it has issued either a grading or building permit to determine compliance with its ordinances, regulations, and codes, including its Storm Water Ordinance. Each Co-Permittee, consistent with its ordinances, rules and regulations, inspect each site for which a grading or building permit has been issued for compliance with the conditions of approval governing the permit. These inspections have been expanded by the Co-Permittees to determine that the site has secured coverage under the General Construction Activity Storm Water Permit.

2. The DAMP addresses compliance strategies with regard to industrial and commercial facilities. As part of their Urban Runoff management activities, the Principal Permittee and the County entered into an agreement, dated August 10, 1999 by which they have developed and funded, in cooperation with the Riverside County Environmental Health Department, the "Compliance Assistance Program" (CAP) which includes a storm water survey component as part of existing inspections of hazardous material (as defined in Appendix 4, Glossary) handlers and retail food service activities. The CAP consists of educational outreach to the inspected facilities and detailed storm water compliance surveys for each facility that must secure a hazardous materials permit for either storing, handling or generating such materials (there are approximately 5,500 facilities of which approximately 2,300 are inspected annually, and all facilities are inspected at least once during a two year cycle) and retail food facilities (there are approximately 6,750 facilities, all of which are inspected 1 to 3 times annually). Storm Water Compliance Surveys are conducted with each inspection of hazardous materials facilities, and at least once during the permit term for restaurants. Restaurant inspectors are also authorized to conduct additional surveys if they observe an illegal discharge or ordinance violation. The type of industrial/commercial establishment that is inspected includes, but is not limited to, automobile mechanical repair, maintenance, fueling, or cleaning operation, automobile or other vehicle body repair or painting operations, and painting or coating operations. Completed surveys that indicate non-compliance are forwarded to the appropriate jurisdiction's enforcement division for follow up action. In addition, the cities of Corona and Riverside, which operate publicly owned treatment works (POTW), conduct annually on average, approximately 4,400 wastewater pre-treatment inspections, on a variety of industrial and commercial establishments within their respective jurisdictions, including, but not limited to, retail food establishments, car washes, and carpet, drape & furniture cleaning establishments. The Permittees have agreed to notify Regional Board staff when conditions are observed during such inspections that appear to be in violation of either the Storm Water General Permits or a permit issued by the Regional Board.

3. An evaluation of the Permittees' inspection programs during the third term permit indicated a wide range of compliance and non-compliance with the construction

site and industrial and commercial facilities inspection requirements. In many instances, the facilities' return to compliance was not properly documented. This Order includes requirements for a more effective inspection program and includes a performance measure, time to return to compliance, as a metric for program effectiveness.

I. ILLICIT CONNECTIONS/ ILLEGAL DISCHARGES (IC/ID)

1. Illegal discharges to the MS4s can contribute to contamination (as defined in Appendix 4, Glossary) of Urban Runoff and other surface waters. During the first term permit, the underground storm drains were inspected for illicit connections and only one illicit connection was identified. Open channels and other aboveground elements of the MS4 facilities are inspected for evidence of illegal discharges as an element of routine maintenance by the Permittees. The Permittees also developed a program to prohibit IC/IDs to their MS4 facilities. Continued surveillance and enforcement of these programs are required to eliminate IC/IDs. The Permittees have a number of procedures in place to eliminate IC/IDs to the MS4s, including construction, commercial, and industrial facility inspections, MS4 facility inspections, water quality monitoring and reporting programs, and public education.

2. The Permittees have the authority to control pollutants in Urban Runoff, to prohibit IC/ID, to control spills, and to require compliance and carry out inspections of the MS4 facilities within their respective jurisdictions. The Co-Permittees have been extended necessary legal authority through California statutes and local charters. Consistent with this statutory authority, each of the Co-Permittees have adopted their respective Storm Water Ordinances.

3. Even though the Permittees have established the authority and the procedures to detect and eliminate IC/IDs, audits conducted during the third term permit indicated that this program element is generally carried out passively through complaint response. IC/IDs are also detected through inspection programs and maintenance activities. Reports from maintenance inspectors are also typically logged as complaints. This Order requires each Permittee to revise this program element based on the Center for Watershed Protection's Illegal Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, or equivalent program.

J. TECHNOLOGY-BASED EFFLUENT LIMITATIONS (Not Applicable)

K. WATER QUALITY-BASED EFFLUENT LIMITATIONS (WQBELs)

1. 40 CFR 122.44(d) requires that NPDES permits include WQBELs to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality criteria have not been established, 40 CFR 122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a), proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information, or an indicator parameter. In *Defenders of Wildlife, et al* v. *Browner,* No. 98–71080 (9th Cir, October 1999), the Court held that the CWA does not require strict compliance with State water quality standards for MS4 permits under section 301(b)(1)(C), but that at the same time, the CWA does give the permitting authority the discretion to incorporate appropriate water quality-based effluent limitations under another provision, CWA Section 402(p)(3)(B)(iii). The use of BMPs to control or abate the discharge of pollutants is allowed by 40 CFR 122.44(k)(3) when numeric effluent limitations are infeasible or when practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. The legislative history and the preamble to the federal storm water regulations indicate that the Congress and the USEPA were aware of the difficulties in regulating Urban Runoff solely through traditional end-of-pipe treatment. It is the Regional Board's intent to require the Permittees to implement best management practices consistent with the MEP standard in order to support attainment of water quality standards. This Order includes Receiving Water Limitations based on water quality objectives; it prohibits the creation of nuisance and requires the reduction of water quality impairment in Receiving Waters. The Permit includes a procedure for determining whether Urban Runoff is causing or contributing to exceedances of Receiving Water Limitations and for evaluating whether DAMP must be revised to meet water quality standards. The Order establishes an iterative process to determine compliance with the Receiving Water Limitations.

2. T o support attainment of water quality standards, consistent with the MEP standards, this Order aims to reduce the discharge of pollutants in Urban Runoff from the MS4s by requiring Permittees to:

   a. Implement BMPs at Permittee facilities and activities,

   b. Require BMPs, to be implemented prior to accepting discharge into their MS4,,

   c. Implement and annually evaluate the DAMP and each Permittee's local implementation management plan for effectiveness in reducing pollutants, and

   d. Perform monitoring and reporting to determine adequacy of BMPs within the Permit Area and compare the results to water quality standards, WLAs or interim goals and USEPA numeric benchmarks.

3. This Order includes TMDL WLAs that are expressed as WQBELs. The TMDLs adopted by the Regional Board and approved by the State Board, Office of Administrative Law and the USEPA are incorporated into this Order. USEPA's Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits, 60 FR 43761 (Aug 26, 1996) recognizes the need for an iterative approach to control pollutants in urban storm water discharges. Since the compliance dates for the TMDLs in this Order are outside the five year term of this Order, the Permittees are required to monitor and report effectiveness of the BMPs specified in the TMDL Implementation Plans and this Order with respect to pollutant reduction goal(s) as one measure of progress towards attainment of WLAs in accordance with the compliance schedules specified in the TMDL implementation plans. The two approved TMDLs within the Permit Area are described in Section F, above. These include the following:

a. MSAR Bacterial Indicator TMDL

i. The TMDL relies on this Order to implement the WLAs for Urban Runoff.

ii. This Order requires the Permittees within the MSAR TMDL area to fully comply with the implementation plan. The implementation plan includes requirements for monitoring, and submittal of plans and schedules to implement short term solutions and develop long-term solutions to achieve TMDL compliance by the compliance dates.

b. Canyon Lake and Lake Elsinore Nutrient TMDLs

i. This Order is consistent with the urban WLAs specified in the Canyon Lake and Elsinore Nutrient TMDLs.

ii. This Order requires the Permittees to identify sources of impairment, propose BMPs to address those sources, and to monitor, evaluate and revise BMPs based on the monitoring results. Specific Implementation Plan tasks are described in Chapter 5 of the Basin Plan and are assigned to one or more of the Permittees. Requirements of the TMDL implementation plan tasks are incorporated into this Order and Chapter 13 of the DAMP.

iii. In Chapter 13 of the DAMP submitted with the ROWD, the Permittees have proposed BMP programs, consistent with the aforementioned TMDL implementation plan tasks.

iv. This Order also requires the Permittees to monitor at representative urban runoff monitoring locations, the effectiveness of BMPs implemented in the watershed in reducing pollutants of concern in urban runoff to determine progress towards attainment of WLAs by the compliance date.

L. WATER QUALITY CONTROL PLAN (BASIN PLAN)

1. The Regional Board adopted a revised Water Quality Control Plan for the Santa Ana River Basin (hereinafter Basin Plan) that became effective on January 24, 1995. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters in the Santa Ana Region addressed through the Plan.

2. More recently, the Basin Plan was amended significantly to incorporate revised boundaries for groundwater subbasins, now termed "management zones", new nitrate-nitrogen and TDS objectives for the new management zones, and new nitrogen and TDS management strategies applicable to both surface and ground waters. This Basin Plan Amendment was adopted by the Regional Water Board on January 22, 2004. The State Board and the Office of Administrative Law (OAL) approved the amendment on September 30, 2004 and December 23, 2004, respectively. The USEPA approved the surface water standard and related provisions of the amendment on June 20, 2007.

3. TDS and TIN limitations in Table 4-1 of the Basin Plan are specified in this Order for Permittees' de minimus discharges . Where dry weather flows are identified as part of the IC/ID program element, this Order also requires Permittees to establish their baseline discharge concentration for dry weather conditions.

4. As discussed in Section K, Water Quality Based Effluent Limitations, the Basin Plan has been amended to incorporate several TMDLs and TMDL implementation plans adopted for waterbodies within the Permit Area. In addition, the Basin Plan implements State Board Resolution 88-63, which established a state policy that all waters, with certain exceptions, are suitable or potentially suitable for municipal or domestic water supply. Thus, as discussed in detail in the Fact Sheet, Beneficial Uses recognized in the Basin Plan for Receiving Waters in the Permit Area are as follows:

   a. Municipal and Domestic Supply,
   b. Agricultural Supply,
   c. Industrial Service Supply,
   d. Industrial Process Supply,
   e. Groundwater Recharge,
   f. Hydropower Generation,
   g. Water Contact Recreation,
   h. Non-contact Water Recreation,
   i. Warm Freshwater Habitat,
   j. Limited Warm Freshwater Habitat,
   k. Cold Freshwater Habitat,

l. Preservation of Biological Habitats of Special Significance,
m. Wildlife Habitat,
n. Rare, Threatened or Endangered Species, and
o. Spawning, Reproduction, and Development

5. The existing and potential Beneficial Uses of groundwater that could be impacted by the discharge of Urban Runoff within the Permit Area include one or more of the following:

   a. Municipal and Domestic Supply,
   b. Agricultural Supply,
   c. Industrial Service Supply, and
   d. Industrial Process Supply

6. The Basin Plan also incorporates by reference all State Board water quality control plans and policies including the 1990 Water Quality Control Plan for Ocean Waters of California (Ocean Plan) and the 1974 Water Quality Control Policy for Enclosed Bays and Estuaries of California (Enclosed Bays and Estuaries Policy).

M. NATIONAL TOXICS RULE (NTR) AND CALIFORNIA TOXICS RULE (CTR) (Not Applicable)

NTR and CTR are blanket water quality criteria that apply to all surface water discharges. However, the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* states that the Policy does not apply to regulation of storm water discharges. Regional Board believes that compliance with water quality standards through implementation of BMPs is appropriate for regulating Urban Runoff. The USEPA articulated this position on the use of BMPs in storm water permits in the policy memorandum entitled, ''Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits'' (61 FR 43761, August 9, 1996).[16]

N. STATE IMPLEMENTATION POLICY (SIP) (Not Applicable)

See Section M, above.

O. COMPLIANCE SCHEDULES AND INTERIM REQUIREMENTS

The Basin Plan contains schedules for achieving compliance with WLAs for bacterial indicators in the Middle Santa Ana River watershed and nutrients in the San Jacinto watershed (Canyon Lake/Lake Elsinore). It is appropriate to require municipalities within the watershed to comply with those time schedules for various deliverables as

[16] See discussions on Wet Weather Flows in the Federal Register/Vol. 65, No. 97/Thursday, May 18, 2000/Rules and Regulations

specified in the approved implementation plans. Additionally, since the TMDL compliance dates are outside the term of this permit, it is also appropriate to require the Permittees to monitor and report the effectiveness of BMPs implemented in the watershed to evaluate progress towards attainment of WLAs by the time schedules specified in the adopted TMDLs. This Order includes the schedules for deliverables as part of the TMDL implementation plans as well as a requirement to monitor the effectiveness of BMPs in the watershed in reducing pollutant discharges and to report progress towards compliance with the TMDL WLAs by the compliance dates.

P. ANTIDEGRADATION POLICY

40 CFR 131.12 requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Board established California's antidegradation policy in Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. As discussed in detail in the Fact Sheet (see sections IV and V), the permitted discharges are consistent with the antidegradation provisions of 40 CFR 131.12 and State Board Resolution No. 68-16.

Q. ANTI-BACKSLIDING

Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this order are at least as stringent as the effluent limitations in the previous order.

R. PUBLIC EDUCATION/PARTICIPATION

1. Public participation during the development of Urban Runoff management programs and implementation plans is necessary to ensure that all stakeholder interests and a variety of creative solutions are considered. In addition, the federal storm water regulations require public participation in the development and implementation of the Urban Runoff management program. As such, the Permittees are required to solicit and consider all comments received from the public and submit copies of the comments to the Executive Officer of the Regional Board with the Annual Reports. In response to public comments, the Permittees may modify reports, plans, or schedules prior to submittal to the Executive Officer.

2. There are pollutants in Urban Runoff from privately owned and operated facilities such as residences, businesses and commercial establishments and public and

private institutions. A successful NPDES MS4 permit program should include the participation and cooperation of public entities, private businesses, and public and private institutions. Therefore, public education is a critical element of the DAMP. As the population increases in the Permit Area, it will be even more important to continue to educate the public regarding the impact of human activities on the quality of Urban Runoff.

3. In addition to the Regional Board, a number of other stakeholders are involved in the management of the water resources of the Region. These include, but are not limited to, the incorporated cities in the Region, POTWs, the three counties, and the Santa Ana Watershed Project Authority and its member agencies. The entities listed in Appendix 2 are considered as potential dischargers of Urban Runoff in the Permit Area. It is expected that these entities will also work cooperatively with the Permittees to manage Urban Runoff. The Regional Board, pursuant to 40 CFR 122.26(a), has the discretion and authority to require non-cooperating entities to participate in this Order or to issue individual storm water permits.

4. Cooperation and coordination among the stakeholders (regulators, Permittees, the public, and other entities) are critical to optimize the use of finite public resources and ensure economical management of water quality in the Region. Recognizing this fact, this Order focuses on integrated watershed management and seeks to integrate the programs of the stakeholders, especially the holders of the three MS4 permits within the Region.

5. Education is an important aspect of every effective Urban Runoff management program and the basis for changes in behavior at a societal level. Education of municipal planning, inspection, and maintenance department staff is especially critical to ensure that in-house staff understand how their activities impact water quality, how to accomplish their jobs while protecting water quality, and their specific roles and responsibilities for compliance with this Order. Public education, designed to target various urban land users and other audiences, is also essential to inform the public of how individual actions affect receiving water quality and how adverse effects can be minimized.

6. Some Urban Runoff issues, such as public education and training, can be effectively addressed on a regional or statewide basis. Regional approaches to Urban Runoff management can improve program consistency and promote sharing of resources, which can result in implementation of more efficient programs. In particular the counties of San Bernardino and Riverside and their collective municipalities are encouraged to cooperatively work together and generate a unified education and training program.

S. PERMITTEE FACILITIES AND ACTIVITIES

1. The Permittees own/operate facilities where industrial or related activities take place that may have an impact on Urban Runoff quality. Some of the Permittees enter into contracts with outside parties to carry out activities that may also have an impact on Urban Runoff quality. These facilities and related activities include, but are not limited to, street sweeping, catch basin cleaning, maintenance yards, vehicle and equipment maintenance areas, waste transfer stations, corporation and storage yards, parks and recreational facilities, landscape and swimming pool maintenance activities, MS4 maintenance activities and the application of herbicides, algaecides and pesticides.

2. This Order requires continued implementation of BMPs intended to reduce pollutant discharges from those Permittee activities/facilities that are found to be significant sources of pollutants in Urban Runoff. This Order prohibits non-storm water discharges from facilities owned or operated by the Permittees unless the discharges are exempt under Section V of this Order or are permitted by the Regional Board under an individual NPDES permit.

3. Program evaluations conducted during the third term permit indicated varying degrees of compliance/noncompliance at public agency facilities and activities. This Order requires each Permittee to inventory its fixed facilities, field operations and drainage facilities to ensure that public agency facilities do not cause or contribute to a pollution or nuisance in receiving waters. These fixed public facilities and field operations are to be prioritized for inspection according to their threat to water quality.

T. MUNICIPAL CONSTRUCTION PROJECTS

1. The third term permit authorized the discharge of storm water from construction activities on an acre or more, that are under ownership or direct responsibility of the Permittees. Permittees were required to notify the Regional Board prior to commencement of construction activities, and to comply with the latest Statewide General Construction Permit. Permittees were also required to develop a SWPPP and monitoring program specific to the construction site. Program evaluations conducted during the third term permit indicated that some Permittees were not submitting or were not aware of the requirement to submit a Notice of Intent and subsequent Notice of Termination for municipal construction projects. This Order continues the notification requirement.
2. This Order builds upon the requirement of the third term permit by requiring Permittees to include post-construction BMP information for Permittee projects meeting WQMP or General Construction Permit criteria along with the Notice of Termination submitted to the Executive Officer upon completion of the construction activity. The Notice of Termination must include photographs of the completed project, a location map, structural post-construction BMP location, field verification

report and long term operation and maintenance responsibility. Permittees are required to develop a database of post-construction BMPs for which they are responsible and shall reference this database in the LIPs.

3. Emergency Permittee public works projects required to protect public health and safety are exempted from these requirements, until the emergency ends, at which time they need to comply with the requirements.

U. MONITORING AND REPORTING

1. 40 CFR 122.48 requires that all NPDES permits specify requirements for monitoring and reporting. Sections 13267 and 13383 of the CWC authorize the Regional Board to require technical and monitoring reports. The Monitoring and Reporting Program, Attachment 3, establishes monitoring and reporting requirements to implement federal and State requirements.

2. An effective monitoring program characterizes Urban Runoff, identifies problem areas, and determines the impact of Urban Runoff on receiving waters and the effectiveness of BMPs. The Principal Permittee administers the Consolidated Program for Water Quality Monitoring[17] (CMP) for the Permittees. The CMP includes wet and dry weather monitoring of MS4 outfalls and Receiving Waters throughout Riverside County.

3. The Regional Board recognizes the importance of watershed management efforts and regional planning and coordination in the development and implementation of programs and policies related to receiving water quality protection, including the Urban Runoff program and TMDL processes. In light of recent TMDLs that have been developed and the expectation of future TMDLs, this Order requires the Permittees to develop a Coordinated Watershed Monitoring Plan that shows the nexus among various urban runoff related monitoring programs that the Permittees are participating and the MS4 permit requirements including but not limited to WLA pre-compliance, BMP effectiveness, urban source and trend evaluation, receiving water quality and hydromodification effects monitoring.

4. Multiple entities, such as POTWs, MS4s, CAFOs, and other permitted and non-permitted dischargers, discharge into the same water bodies. The discharges from these various sources could potentially affect the water quality of these water bodies even when these dischargers are complying with their permits. Monitoring the receiving waters where these multiple types of discharges take place is necessary to determine these water bodies' compliance with water quality objectives and their attainment of Beneficial Uses.

[17] Consolidated Program for Water Quality Monitoring, Riverside County Flood Control and Water Conservation District, March 1994.

5. In the past, these entities have individually monitored the water bodies receiving their discharges to determine impacts to these waters from their discharges. The monitoring has resulted in fragmented data that is inconsistent in quality, and that has potentially resulted in duplication of resources.

6. The Storm Water Monitoring Coalition's "Model Monitoring Program for Municipal Separate Storm Sewer Systems in Southern California", August 2004 Technical Report #419 indicated that "…the lack of mass emissions stations in the inland counties hampers their ability to estimate the proportional contribution of these inland areas to cumulative loads downstream." The coalition consists of representatives from the Counties of Ventura, Los Angeles, Orange, San Bernardino, Riverside, and San Diego and the City of Long Beach. This Order includes requirements for mass emissions monitoring.

7. Every two years, the Regional Board will assess readily available data to determine if the water bodies within its jurisdiction comply with the water quality objectives and attain the assigned Beneficial Uses.

8. The data reviewed for the assessment come from sources such as municipalities, POTWs, individual public submittals, TMDL monitoring, and special studies. The data necessary for the assessment should be of known and documented quality and generated under the auspices of a Quality Assurance Project Plan (QAPP). The data will also be statistically sufficient to assess if the water body is meeting water quality objectives and to determine if water quality is declining overtime.

9. A coordinated monitoring effort is needed for each watershed in the Santa Ana Region that will provide statistically sufficient data. These data should be collected with appropriate quality control and quality assurance programs and should be made available in an electronic format to meet assessment objectives.

10. The Regional Board has identified watersheds in the Santa Ana Region where potential duplication of effort is taking place. These watersheds include: the Upper Santa Ana River watershed, Middle Santa Ana River watershed, Lower Santa Ana River watershed, and the San Jacinto River watershed.

11. Regional Board staff proposes to require the various entities discharging into the waterbodies in these watersheds to coordinate monitoring efforts, prepare, submit for approval, and implement a watershed monitoring plan; a Quality Assurance Project Plan, and a data management, validation, verification mechanism in order to meet the assessment objectives.

12. Under the direction of the storm water permittees in Southern California, the Southern California Coastal Water Research Project is coordinating a watershed

monitoring effort in Southern California. The Santa Ana Region is included in their monitoring effort. This effort will potentially produce data that will meet the needs of the Regional Board in assessing water quality. This Order requires the Permittees to continue their participation in this regional effort.

V. STANDARD AND SPECIAL PROVISIONS

The dischargers must comply with all standard provisions and with those additional conditions that are applicable under Federal NPDES Regulations 40 CFR122.41 and 40 CFR 122.42.

W. NOTIFICATION OF INTERESTED PARTIES

The Regional Board has notified the dischargers and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet for this Order.

X. CONSIDERATION OF PUBLIC COMMENT

The Regional Board has notified the Permittees, all known interested parties, and the public of its intent to issue Waste Discharge Requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge and the requirements of this Order. Details of the Public Hearing are provided in the Fact Sheet for this Order.

Y. ALASKA RULE

On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal water quality standards (WQS) become effective for CWA purposes (40 CFR 131.21, 65 FR 24641, April 27, 2000). Under the revised regulation (also known as the Alaska rule), USEPA must approve new and revised standards submitted to USEPA after May 30, 2000 before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.

Z. COMPLIANCE WITH CZARA

The Coastal Zone Act Reauthorization Amendments of 1990 (CZARA), Section 6217(g), requires coastal states with approved coastal zone management programs to address non-point source pollution impacting or threatening coastal water quality. CZARA addresses five sources of non-point pollution: agriculture, silviculture, urban, marinas, and hydromodification. This order addresses the management measures required for the urban category, with the exception of septic systems. Compliance with requirements specified in this Order relieves the Permittees for developing a non-point source plan, for the urban category, under CZARA. The Regional Board addresses septic systems through the administration of other programs.

AA. NON-POINT SOURCE (NPS) DISCHARGES:

Consistent with the State Board's 2004 "Policy for the Implementation and Enforcement of the Nonpoint Source Pollution Control Program," the Regional Board may issue Waste Discharge Requirements for non-point source (NPS) pollutant discharges, such as agricultural irrigation runoff or return flows that are not subject to NPDES requirements, if identified as a significant source of pollutants. In addition, if the water quality significance of NPS discharges is not clearly understood, the Regional Board may issue conditional waivers of Waste Discharge Requirements to NPS dischargers, and require monitoring to gather the information necessary to effectively manage these discharges.

BB. STRINGENCY REQUIREMENTS FOR INDIVIDUAL POLLUTANTS. (N/A)

CC. FISCAL RESOURCES

California is experiencing a fiscal crisis unprecedented since the Great Depression. The June 2009 unemployment rate is 11.6 percent in California and 13.9 percent in Riverside County.[18] The Federal Reserve this week projected that the national unemployment rate, currently at a 26-year high of 9.5 percent, will pass 10 percent by the end of the year. Most federal policymakers said it could take "five or six years" for the economy and the labor market to get back on a path of long-term health.[19] State and local governments are experiencing significant budgetary shortfalls and are reducing staffing and programs across the board. Given this economic environment, priority will be given to preserving the most essential elements of existing Urban Runoff programs and identifying and implementing strategies to improve the efficiency of existing programs in protecting Receiving Waters.

[18] Employment Development Department, State of California, July 17, 2009. http://www.calmis.ca.gov/file/lfmonth/rive$pds.pdf
[19] http://www.msnbc.msn.com/id/31963779/ns/business-stocks_and_economy/

PERMIT REQUIREMENTS:

IT IS HEREBY ORDERED that the Riverside County Flood Control and Water Conservation District, the County of Riverside, and the incorporated cities of Beaumont, Calimesa, Canyon Lake, Corona, Hemet, Lake Elsinore, Menifee, Moreno Valley, Murrieta, Norco, Perris, Riverside, San Jacinto, and Wildomar, in order to meet the provisions contained in Division 7 of the Water Code and regulations adopted thereunder, and the provisions of the CWA, as amended, and the regulations and guidelines adopted there under, must comply with the following:

III. PERMITTEE RESPONSIBILITIES:

A. RESPONSIBILITIES OF THE PRINCIPAL PERMITTEE:

1. The Principal Permittee shall be responsible for managing the overall Urban Runoff program and shall:

   a. Coordinate revisions to the DAMP.

   b. Implement management programs, monitoring and reporting programs, and related plans as required by this Order.

   c. Coordinate chemical and biological water quality monitoring and any other monitoring as required by the Executive Officer.

   d. Prepare, coordinate the preparation of, and submit to the Executive Officer, those reports and programs necessary to comply with this Order.

   e. Provide staff support to the Management Steering Committee (Appendix 4, Glossary) to address Urban Runoff management policies for the Permit Area and coordinate the review, and necessary revisions to the DAMP and Implementation Agreement. The Management Steering Committee will continue to meet at least twice annually or more frequently as determined by the chairperson.

   f. Coordinate and conduct Technical Committee (Appendix 4) meetings, at least ten times per year. The Technical Committee will continue to direct the development of the DAMP and coordinate the implementation of the overall Urban Runoff program.

   g. Take the lead role in initiating and developing area-wide programs and activities necessary to comply with this Order.

h. Coordinate activities and participate in committees/subcommittees formed to comply with this Order.

i. Coordinate the implementation of this Order with the Regional Board and Co-Permittees, including the submittal of all reports, plans, and programs as required under this Order.

j. Provide technical and administrative support to the Co-Permittees, including informing them of the status of known pertinent municipal programs, pilot projects, and research studies.

k. Coordinate with the Co-Permittees the implementation and necessary updates to Urban Runoff quality management programs, monitoring and reporting programs, implementation plans, public education, other pollution prevention measures, household hazardous waste collection, and BMPs outlined in the DAMP and take other actions consistent with the MEP standard.

l. Gather and disseminate information on the status of statewide Urban Runoff programs and evaluate the information for potential use in the execution of this Order. Hold workshops focused on Urban Runoff regulatory requirements, BMPs, and other related topics.

m. Compile information provided by the Co-Permittees and determine their effectiveness in attaining receiving water quality standards. This determination must include a comparative analysis of monitoring data to the applicable water quality objectives for Receiving Waters as specified in Chapter 4 of the Basin Plan. A pollutant source investigation and control plan must be performed when elevated pollutant levels are identified.

n. Solicit and coordinate public input for major changes to the Urban Runoff management programs and the implementation thereof.

o. Coordinate the development and implementation of procedures, and performance standards, and assist in the consistent implementation of BMPs consistent with the MEP standard, as well as Urban Runoff management programs, among the Co-Permittees.

p. Participate in watershed management programs and regional and/or statewide monitoring and reporting programs.

q. In collaboration with the Co-Permittees, other MS4 Programs and/or CASQA, develop guidelines for defining expertise and competencies of storm water program managers and inspectors and develop and submit for approval a training program for various positions in accordance with these guidelines and Section XIV of this Order.

r. Within 6 months of adoption of this Order, the Principal Permittee shall develop a library of BMP performance reports, and revise the library annually thereafter. At a minimum, the performance report should remove obsolete or ineffective BMPs and reflect updated reports from CalTrans, ASCE or other appropriate sources that include more effective and proven BMPs. The library may use national, statewide or regional studies. The purpose of this library is to facilitate the Permittees approval of BMPs, review and approval of WQMPs, etc.

s. Within 6 months of adoption of this Order, the Principal Permittee shall coordinate a review of the DAMP with the Co-Permittees to determine the need for update or revisions to ensure compliance with the requirements of this Order and establish a schedule for those revisions.

2. The activities of the Principal Permittee shall also include, but not be limited to, the following for MS4 systems owned or operated by the Principal Permittee:

a. Pursue enforcement actions as necessary within its jurisdiction to ensure compliance with storm water management programs, ordinances and implementation plans, including removal via enforcement authority of undocumented connections and prohibition of illegal discharges.

b. Ensure that encroachment permits to its MS4 require encroachment permittees to comply with local storm water ordinances. The Principal Permittee's obligation shall be considered met if they verify that encroachment permittees have an approved WQMP from the Permittee with jurisdictional authority over the development prior to issuing the encroachment permit.

c. Conduct inspections and maintain the MS4 facilities over which it has jurisdiction.

d. Review and revise, if necessary, those agreements to which it is a party and those regulations and policies it deems necessary to provide adequate legal authority to maintain the MS4 facilities for which it has jurisdiction and to take those actions required of it by this Order and the federal Storm Water Regulations (see Section VIII);

e. Monitor, document, and report that appropriate enforcement actions against illegal discharges to the MS4 facilities for which it has jurisdiction are taken and pursued as necessary to ensure compliance with Urban Runoff management programs, implementation plans, and regulations and policies, including physical elimination of IC/IDs (see Section VIII);

f. Continue to respond or cause the appropriate entity or agency to respond to emergency situations such as accidental spills, leaks, and IC/IDs to prevent or reduce the discharge of pollutants to its MS4 facilities and to the Receiving Waters (see Section IX).

g. Track, monitor, and keep training records of all personnel involved in the implementation of the Principal Permittee's storm water program.

h. Implement management programs, monitoring programs, and related plans as required by this Order.

B. RESPONSIBILITIES OF THE CO-PERMITTEES:

1. Each Co-Permittee shall complete a LIP, in conformance with Section IV of this Order and the approved LIP template.

2. Each Co-Permittee shall be responsible for managing the Urban Runoff program within its jurisdiction and shall:

   a. Maintain adequate legal authority to control the contribution of pollutants to the MS4 and enforce those authorities.

   b. Conduct inspections of and maintain its MS4 facilities in accordance with the criteria developed pursuant to Section XIV.C.

   c. Continue to implement management programs, monitoring and reporting programs, appropriate BMPs listed in the DAMP and LIP, and related plans as required by this Order and take such other actions consistent with the MEP standard.

   d. Continue to seek sufficient funding for the area-wide Urban Runoff management plan, local Urban Runoff program management, Urban Runoff enforcement, public outreach and education activities and other Urban Runoff related program implementation.

   e. Continue to coordinate with other departments and agencies within the Permittee's municipality as appropriate, to facilitate the implementation of this Order and the DAMP/LIP.

   f. Obtain public input for any proposed major changes to its urban storm water management program and implementation plans.

   g. Maintain up-to-date MS4 facility maps. Annually review these maps and if necessary, submit revised maps to the Principal Permittee with the information required for preparation of the annual report.

   h. Prepare and submit to the Principal Permittee in a timely manner specific reports/information, related to the Co-Permittees' Urban Runoff program, necessary to develop an Annual Report for submittal to the Executive Officer.

3. The Co-Permittees' activities shall include, but not be limited to, the following:

   a. Participate in all the Management Steering Committee and at least 80% of the Technical Committee meetings as indicated in Section III.A.1.e & f. of this Order.

   b. Conduct and coordinate with the Principal Permittee surveys and monitoring needed to identify pollutant sources and drainage area characteristics.

   c. Prepare and submit reports to the Principal Permittee and/or the Regional Board in a timely manner.

   d. Review, comment, approve, and implement plans, strategies, management programs, monitoring and reporting programs, as developed by the Principal Permittee, Technical Committee, or the Management Steering Committee to comply with this Order.

   e. Participate in subcommittees formed by the Principal Permittee, Technical Committee, or the Management Steering Committee to comply with this Order.

   f. Respond to or arrange for the appropriate entity or agency to respond to emergency situations such as accidental spills, leaks, IC/IDs, etc., to prevent or reduce the discharge of pollutants to their MS4 facilities and the Receiving Waters.

   g. Continue to pursue enforcement actions as necessary within its jurisdiction for violations of storm water ordinances, and other elements of its Urban Runoff management program.

C. IMPLEMENTATION AGREEMENT

1. In accordance with the scheduling requirement specified in Provision III.A, the Permittees must evaluate their Implementation Agreement and determine the need, if any, for revision. The Annual Report must include the findings of this review and a schedule for any necessary revision(s) to the Implementation Agreement.

2. The existing Implementation Agreement shall be reviewed and revised, if necessary, to include any cities that were not signatories to this agreement but have been subsequently added to this Order within 12 months of adoption of this Order. A copy of the signature page and any revisions to the Agreement shall be included in the annual report.

IV. LOCAL IMPLEMENTATION PLAN:

A. Within 12 months of adoption of this Order, the Principal Permittee, in coordination with the Co-Permittees, shall develop and submit for approval of the Executive Officer a Local Implementation Plan (LIP) template. The LIP template shall include a description of all Urban Runoff management program elements as required under this Order, including:

1. A procedure for how each program element of the DAMP shall be implemented;
2. List of project categories over which the Permittee has discretionary approval authority;
3. A list and description of the ordinances, personnel responsible for enforcing the ordinance, plans, policies, procedures, and tools (e.g., checklists, forms, educational materials, LID BMPs, etc.) used to review WQMP, erosion and sediment control plans, grading plans, control measures to reduce and mitigate potential pollutant sources within each Permittee's jurisdiction, etc.
4. The organizational units responsible for implementation of each program element including the interagency or interdepartmental sewer spill response coordination within each Permittee's jurisdiction. Identify the Departments and Sections whose programs may have an impact on water quality and/or quantity (hydrology) (e.g., Public Works, Planning, and Engineering). Identify titles (and current staff holding that position) responsible for Urban Runoff program implementation. Identify the training needs for each position to implement Urban Runoff program;
5. Develop a database for documenting training, inspections, storm drain cleaning and waste characterization of storm drain cleanouts and street sweeping wastes;
6. Identify enforcement procedures and actions and procedures for tracking return to compliance;
7. Establish internal reporting requirements to ensure and promote accountability;
8. Specify the verification procedure(s) and any tools utilized to verify that coverage under the General Construction Permit;
9. Identify and map in GIS format the natural channels, wetlands, riparian corridors, buffer zones that it will require, conserve and and identify conservation and maintenance measures for these features that will be followed. The Watershed Action Plan should include information needed for this effort. This requirement may be met through development of areawide HCOC maps or other joint efforts.
10. Each Permittee shall include the ordinances, design standards, procedures and other tools it uses to implement green infrastructure/low impact development principles for public and private development projects.

11. A description of development strategies including incentives for redevelopment, brownfield development, high density, vertical density, mixed use and transit-oriented developments, and water conservation and re-use projects.
12. Identify landform grading techniques[20], LID techniques and revegetation as an alternative to traditional approaches, particularly in areas susceptible to erosion and sediment loss including hillside development projects;
13. Include pollutant source investigation and control plan required by Section VII.D.1, of this Order; and
14. Describe an adaptive method of evaluation and assessment of program effectiveness for the purpose of identifying program improvements.

B. Within 6 months of approval of the LIP template by the Executive Officer, each Permittee shall complete a LIP[21], in conformance with the LIP template that is signed by the City Manager/County Executive Officer or person with the delegated authority over the Permittees facilities, such as the General Manager/Chief Engineer.

C. Each Permittee shall annually review its activities and facilities to determine the need for revisions to its LIP, evaluate the effectiveness of its LIP, revise the LIP, as necessary, in compliance with Sections VIII.J., VIII.K., IX.C., of this Order, and document revisions in the annual report. The first revisions to the LIP shall at a minimum include:

1. A plan and schedule to incorporate control measures necessary to meet Receiving Water Limitations and WLAs.

V. DISCHARGE PROHIBITIONS:

A. In accordance with the requirements of 40 CFR 122.26(d)(2)(i)B) and 40 CFR 122.26(d)(2)(i)(F), the Permittees shall prohibit illicit connections and illegal discharges (see Appendix 4) from entering the MS4 unless such discharges are either authorized by an NPDES permit, or not prohibited in accordance with Section V, below.

B. The discharge of Urban Runoff from the MS4 to Receiving Waters containing Pollutants, including trash and debris, that have not been reduced consistent with the MEP standard is prohibited.

[20] http://www.swrcb.ca.gov/water_issues/programs/nps/encyclopedia/3_2d_const_gradexcv.shtml

[21] As the Principal Permittee is not a general purpose government, some portions of the NPDES MS4 Program may not be applicable to it. The Principal Permittee should identify the basis for its exclusion from the applicable program elements in the appropriate LIP section.

C. Non-storm water discharges from public agency activities into Waters of the U.S. are prohibited unless the non-storm water discharges are permitted by a NPDES permit, granted a waiver, or are as otherwise specified in Section V, below.

D. Discharges from the MS4 shall be in compliance with the discharge prohibitions contained in Chapter 5 of the Basin Plan.

E. Discharges into and from the MS4 in a manner causing, or threatening to cause, a condition of pollution, contamination, or nuisance (as defined in CWC Section 13050), in waters of the State are prohibited.

F. The discharge of any substances in concentrations toxic to animal or plant life is prohibited.

G. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.

H. The disposal of pollutants onto public or private land is prohibited.

VI. EFFLUENT LIMITATIONS, DISCHARGE SPECIFICATIONS AND OTHER TMDL RELATED REQUIREMENTS

For purposes of this Order, a discharge may include storm water or other types of discharges identified below.

A. ALLOWED DISCHARGES:

The discharges identified need not be prohibited by the Permittees unless identified by the Permittees or the Executive Officer as a significant source of pollutants or as a significant vehicle that may cause pollutants to migrate to Waters of the U.S. The DAMP shall include public education and outreach activities directed at reducing these discharges even if they are not substantial contributors of pollutants to the MS4s.

1. Discharges composed entirely of storm water;
2. Air conditioning condensate;
3. Irrigation water from agricultural sources ;
4. Discharges from landscape irrigation, lawn/garden watering and other irrigation waters;
5. Passive foundation drains[22];
6. Passive footing drains[23];

[22] Allowed discharges only if the source water drained from the foundation is storm water or uncontaminated groundwater. Discharges from contaminated groundwater may require coverage under the De Minimus Permit (Order No. R8-2003-0061, NPDES Permit No CAG998001)22 or its latest version.

7. Water from crawl space pumps[24];
8. Non-commercial vehicle washing,(e.g. residential car washing (excluding engine degreasing) and car washing fundraisers by non-profit organization);
9. Dechlorinated swimming pool discharges (cleaning wastewater and filter backwash shall not be discharged into the MS4s or to waters of the U.S.)
10. Diverted stream flows[25];
11. Rising ground waters[26] and natural springs;
12. Uncontaminated ground water infiltration as defined in 40 CFR 35.2005 (20) and uncontaminated pumped groundwater (as defined in Appendix 4, glossary),
13. Flows from riparian habitats and wetlands;
14. Emergency fire fighting flows (i.e., flows necessary for the protection of life and property do not require BMPs and need not be prohibited. However, appropriate BMPs to reduce the discharge of pollutants to the MEP must be implemented when they do not interfere with health and safety issues [see also Section XIV Provision 3]).
15. Waters not otherwise containing wastes as defined in California Water Code Section 13050 (d), and
16. Other types of discharges identified and recommended by the Permittees and approved by the Regional Board.

When types of discharges listed above are identified as a significant source of pollutants or a significant vehicle that may cause pollutants to migrate to the Receiving Waters, a Permittee must either: prohibit the discharge category from entering the MS4 or ensure that source control BMPs and treatment control BMPs are implemented to reduce or eliminate pollutants resulting from the discharge. The Permittees must evaluate the permitted discharges, as listed above to determine if any are a significant source of pollutants to the MS4 and notify the Executive Officer if any are a significant source of pollutants to the MS4s.

B. DISCHARGE SPECIFICATIONS FOR DISCHARGES FROM PERMITTEE OWNED AND/OR OPERATED FACILITIES AND ACTIVITIES - DE-MINIMUS DISCHARGES :

The following types of discharges by the MS4 Permittees are authorized by this Order. These are de minimus types of discharges listed in the General De Minimus Permit for

---

[23] See footnote 10.

[24] Allowed discharges only if the discharge is uncontaminated, otherwise permit coverage under the De Minimus Permit or Order No. 2006-0008-DWQ (NPDES No. CAG990002), General NPDES Permit for Discharges from Utility Vaults and Underground Structures to Surface Waters (General Permit-Utility Vaults).

[25] Diversion of stream flows that encroach into waters of the US requires a 404 permit from the US Army Corps of Engineers and a 401 Water Quality Certification from the Regional Board. Stream diversion that requires active pumping also requires coverage under the De Minimus Permit.

[26]Discharge of rising ground water and natural springs into surface water is only allowed if groundwater is uncontaminated. Otherwise, coverage under the De Minimus Permit may be required.

Discharges to Surface Waters, Order NO. R8-2009-0003[27], NPDES No. CAG 998001 (General De Minimus Permit). These discharges shall be in compliance with the terms and conditions of the General De Minimus Permit except that separate coverage under that Permit is not required.

1. *Discharges from potable water sources, including water line flushing, superchlorinated water line flushing, fire hydrant system flushing, and hydrostatic test water from pipelines, tanks and vessels*: These discharges shall be dechlorinated to a concentration of 0.1 ppm[28] or less, pH adjusted if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments.

2. *Discharges from lawn, greenbelt and median watering and other irrigation runoff[29] from non-agricultural operations*: These discharges shall be minimized through public education and water conservation efforts, as prescribed under Section XI.E, Residential Program.

3. *Dechlorinated swimming pool discharges:* Dechlorinated to a concentration of 0.1 ppm[30] or less, pH adjusted and reoxygenated if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4s.

4. *Discharges from facilities that extract, treat and discharge water diverted from waters of the US*: These discharges shall meet the following conditions:

   a. The discharges to Waters of the US must not contain pollutants added by the treatment process or pollutants in greater concentration than the influent;
   b. The discharge must not cause or contribute to a condition of erosion;
   c. The extraction and treatment must be in compliance with Section 404 and 401 of the Clean Water Act; and
   d. Conduct monitoring in accordance with Monitoring and Reporting Program attached to this Order.

5. *Construction dewatering wastes:* Total suspended solids shall not exceed 75 mg/L; sulfides shall not exceed 0.4 mg/l; total petroleum hydrocarbons shall not exceed 0.1 mg/L; and oil and grease shall not exceed 15 mg/L.

27 Adopted by the Santa Ana Regional Board on March 24, 2009.
28 Total residual chlorine = 0.1 mg/l or parts per million (ppm) or less; compliance determination shall be at a point before the discharge mixes with any receiving water.

29 Non-agricultural irrigation using recycled water must comply with the statewide permit for Landscape Irrigation Using Recycled Water and the State Department Health guidelines.
30 See footnote 27.

6. *For all De-minimus type of discharges:* The pH of the discharge shall be within 6.5 to 8.5 pH units and there shall be no visible oil and grease in the discharge.

7. Table 4-1 of the Basin Plan incorporates TDS/TIN objectives for groundwater and surface waters within the Santa Ana Region. Permittees discharging to those Receiving Waters shall monitor dry weather flows to ensure compliance with the following for dry weather conditions:

a. For discharges to surface waters where groundwater will not be affected by the discharge, the maximum daily concentration (mg/L) of TDS and/or TIN of the effluent shall not exceed the water quality objectives for the Receiving Water where the effluent is discharged, as specified in Table 4-1 of the Basin Plan[31].

b. For discharges to surface waters where the groundwater will be affected by the discharge, the TDS and/or TIN concentrations of the effluent shall not exceed the water quality objectives for the surface water where the effluent is discharged and the affected groundwater management zone, as specified in Table 4-1 of the Basin Plan. The more restrictive water quality objectives shall govern. However, treated effluent exceeding the groundwater management zone water quality objectives may be returned to the same management zone from which it was extracted without reduction of the TDS or TIN concentrations so long as the concentrations of those constituents are no greater than when the groundwater was first extracted. Incidental increases in the TDS and TIN concentrations (such as may occur during air stripping) of treated effluent will not be considered increases for the purposes of determining compliance with this discharge specification.

8. The Regional Board may add categories of non-storm water discharges that are not significant sources of pollutants or remove categories of non-storm water discharges listed above based upon a finding that the discharges are a significant source of pollutants.

C. WATER QUALITY BASED EFFLUENT LIMITATIONS - TOTAL MAXIMUM DAILY LOADS (TMDLS)

1. MIDDLE SANTA ANA RIVER (MSAR) WATERSHED BACTERIA INDICATOR TMDL

a. **Waste Load allocations:** The County of Riverside and the cities of Corona, Riverside and Norco (see Table 13-1 of the DAMP) shall comply with the WLA for the Middle Santa Ana River Watershed Bacterial Indicator TMDLs as described below:

[31] Resolution No. R8-2004-0001

b. **Dry Summer Conditions** (April 1 through October 31): Compliance shall be achieved as soon as possible, but no later than December 31, 2015.

i. Fecal Coliform WLA[32]

5–sample/30–day logarithmic mean less than 180 organisms/100mL, and not more than 10% of the samples exceed 360 organisms/100mL for any 30–day period.

ii. *e coli* WLA

5–sample/30–day logarithmic mean less than 113 organisms/100mL, and not more than 10% of the samples exceed 212 organisms/100mL for any 30–day period.

c. **Wet Winter Conditions** (November 1 through March 31): Compliance shall be achieved as soon as possible, but no later than December 31, 2025.

i. Fecal Coliform WLA[34]

5–sample/30–day Logarithmic Mean less than 180 organisms/100mL, and not more than 10% of the samples exceed 360 organisms/100mL for any 30–day period.

ii. e*. coli* WLA

5–sample/30–day Logarithmic Mean less than 113 organisms/100 mL and not more than 10% of the samples exceed 212 organisms/100mL for any 30–day period.

d. **MSAR TMDL Urban Source Evaluation Program and Waste Load Allocation Monitoring and Reporting**:

i. On June 14, 2007, the TMDL taskforce members submitted a source evaluation plan and a monitoring plan. The Regional Board approved these plans on June 29, 2007, Resolution No. R8-2007-0046. A revised monitoring plan and an urban bacterial indicator source evaluation plan were approved by the Regional Board on April 18, 2008, Resolution No. R8-2008-0044. The MS4 Permittees within the MSAR watershed shall continue to conduct monitoring and source evaluations in accordance with the approved plans and report the findings in accordance with the schedules specified in the approved plans.

ii. By February 15, 2010, the Permittees shall revise the DAMP to incorporate a plan and a schedule to achieve bacterial indicator WLAs based on the schedule established in the TMDLs. The plan shall at a minimum be based

[32] The fecal coliform WLA becomes ineffective upon the replacement of the REC1 fecal coliform objectives in the Basin Plan by approved REC1 objectives based on E. Coli.

on actual or literature documentation of estimated effectiveness of BMPs to address identified or potential urban bacterial sources in the watershed. The plan shall include workplans or actions proposed by each Permittee within the MSAR[33] to be implemented within its jurisdiction to attain necessary pollution reductions.

iii. The MS4 Permittees within the MSAR watershed shall track and annually report their progress towards compliance (pre-compliance evaluation monitoring) with the WLAs at the locations specified in the MSAR Bacterial Indicator TMDL or other appropriate urban source monitoring locations.

iv. If results of the monitoring and assessment at the specified monitoring locations show that the WLAs are not met, the Permittees within the affected drainage areas shall comply with the following procedure:

a) Each Permittee (or the TMDL taskforce) upstream of the urban source monitoring points shall evaluate and characterize discharges from its significant (36 inches or larger in diameter) outfall locations.

b) Each Permittee (or the TMDL taskforce) shall submit a report to the Executive Officer with proposed actions that describes BMPs that are currently being implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the failure to attain bacterial source reduction goals.

c) The report may be incorporated in the annual report unless the Executive Officer directs a different submittal date. In the annual report due beginning November 15, 2010 and every year thereafter, the Permittees in the MSAR watershed shall report any revisions to the DAMP, LIP or WQMP in response to TMDL requirements. Future workplans or actions to reduce bacterial sources shall consider the impact of projected population growth in the watershed and within each jurisdiction. Effectiveness evaluations shall be based on actual population change.

v. During the pre-compliance period, an iterative approach is appropriate to demonstrate bacterial source reduction in drainage areas tributary to Receiving Waters with WLAs based on TMDL Implementation Plan requirements. Compliance with the WLAs at the urban source monitoring locations or as modeled in accordance with the TMDL Implementation Plan must be achieved by the compliance dates.

[33] The TMDL Taskforce may propose a consolidated workplan to address the problem, in lieu of individual workplans and actions.

e. **Watershed-wide Monitoring Program:** The Permittees shall continue to participate in the watershed-wide monitoring program. Revisions to the watershed wide monitoring will be considered through a public participation process once the TMDLs have been achieved.

2. **LAKE ELSINORE/CANYON LAKE (SAN JACINTO WATERSHED) NUTRIENT TMDLS**

a. The Permittees in the San Jacinto watershed shall comply with the WLAs specified in the San Jacinto Watershed Nutrient TMDLs listed in Tables 8 and 9, below. Compliance may be achieved by implementing the various tasks identified in the TMDL implementation plan.

Table 8 - Canyon Lake
Nitrogen and Phosphorus Waste Load and Load Allocations[a]

Canyon Lake Nutrient TMDL	Final Total Phosphorus Waste Load Allocation (kg/yr)[b, c]	Final TN Waste Load Allocation (kg/yr)[b, c]
Urban	306 (675 lbs/yr)	3,974 (8763 lbs/yr)
Septic systems	139 (306 lbs/yr)	4,850 (10692 lbs/yr)

[a] The WLAs for Canyon Lake apply to those land uses located upstream of Canyon Lake.
[b] Final allocation compliance to be achieved as soon as possible, but no later than December 31, 2020.
[c] TMDL and allocations specified as 10-year running average.

Table 9 - Lake Elsinore
Nitrogen and Phosphorus Waste Load and Load Allocations[a]

Lake Elsinore Nutrient TMDL	Final Total Phosphorus Waste Load Allocation (kg/yr)[b, c]	Final TN Waste Load Allocation (kg/yr)[c, d]
Urban	124 (273.3 lbs/yr)	349 (769.4 lbs/yr)
Septic systems	69 (152 lbs/yr)	608 (1340 lbs/yr)

[a] The Lake Elsinore TMDL allocations for septic systems only apply to those land uses located downstream of Canyon Lake.
[b] Final compliance to be achieved as soon as possible, but no later than December 31, 2020.
[c] TMDL and allocations specified as 10-year running average.
[d] WLA for supplemental water should be met as soon as possible as a 5 year running average.
[e] Allocation for Canyon Lake overflows

b. *Lake Elsinore In-Lake Sediment Nutrient Reduction Plan:* Pursuant to Resolution No. R8-2007-0083, each MS4 Permittee identified in Table 13-1 of the DAMP shall continue to implement the approved strategy for reducing in-lake sediment nutrient loads as summarized in Table 10, below, or as updated by subsequent Regional Board approved revisions:

Table 10 - Lake Elsinore In-lake Sediment Nutrient Reduction Strategy

Lake Elsinore In-lake Sediment Reduction Strategy Task	Due Date
Submit Phase 2 Alternatives	December 31, 2010
Submit O&M for Agreement for Fishery Management Program	December 31, 2010
Submit O&M for Agreement for Aeration and Mixing Systems	December 31, 2010
Submit Phase 2 Projects Plans	June 30, 2011
Complete Phase 2 Project Implementation	December 31, 2014
Implement in-lake and watershed monitoring programs	Annual reports due August 31 every year.

c. *Model Update Plan:* Pursuant to Resolution No. R8-2007-0083, each MS4 Permittee identified in Table 13-1 of the DAMP shall continue to implement the Model Update Plan as per the schedule summarized Table 11 below, or as updated by subsequent Regional Board approved schedule revisions:

Table 11 - Model Update Plan

Model Update Task	Due Date
In-lake Processes Evaluation Study	December 31, 2009
Linkage Analysis Study	December 31, 2009
Watershed Source Loading Study	August 31, 2010
Model Evaluation	December 31, 2010
Construct/Calibrate Model	June 30, 2011
Conduct Model Scenarios	August 31, 2011
Model Update Final Report	November 30, 2011

d. *Pollutant Trading Plan:* Pursuant to Resolution No. R8-2007-0083, each MS4 Permittee identified in Table 13-1 of the DAMP shall continue to participate in the development and implementation of the Pollutant Trading Plan and schedule as per Table 12 below, or as updated by subsequent Regional Board approved schedule revisions:

Table 12 - Pollutant Trading Plan

Description	Due Date
Conduct Feasibility analysis and ID Pollutant Trading Framework	March 2012
Create and Adopt Program Protocols and Program Implementation	August 2012
Submit Pollutant Trading Program	November 30, 2012

e. The Permittees shall annually evaluate their compliance with the adopted TMDLs and TMDL Implementation Plan tasks. If necessary, the Permittees shall propose additional control measures necessary to achieve compliance with the Permittees' WLAs for total phosphorus and TIN.

f. Prior to the TMDL compliance date and pending development and approval of a watershed model, pollutant trading plan and other implementation tasks identified above, the Permittees shall monitor and report the effectiveness of the control measures implemented in the watershed to control nutrient inputs into the lakes from Urban Runoff by implementing the following:

   i. Within twelve months of adoption of this Order, the Permittees within the San Jacinto watershed shall identify representative urban storm water runoff monitoring locations for discharges into the lakes. Selection of those monitoring locations shall take into account the size of the drainage area and potential sources of nutrients within each drainage area. Those monitoring locations may include existing storm water core monitoring locations and the Phase II watershed wide TMDL monitoring locations.

   ii. In the third annual report due after adoption of this Order, include an evaluation of nutrient source reductions during the prior three years. This evaluation should indicate how the source reduction plans implemented by each Permittee are geared towards meeting the WLAs by the 2020 compliance date. Since the WLAs are based on a 10-year running average, data from storm water core monitoring locations may be used to project loading reductions.

   iii. The source reduction plans shall at a minimum be based on actual or literature documentation of estimated effectiveness of BMPs to address identified or potential nutrient sources in the watershed. The plan should include proposed actions and schedules that each Permittee is proposing to implement within its jurisdiction to attain nutrient loading reductions.

iv. The source reduction plans should be reevaluated on a triennial basis. Any needed revisions should consider the impact of projected population growth in the watershed.

v. If triennial nutrient source reduction goals are not met, the Permittees within the affected drainage areas shall comply with the following procedure:

1.) Each Permittee upstream of the representative urban monitoring location shall characterize discharges and identify significant nutrient sources from its significant outfall locations.
2.) Each Permittee shall submit a report with proposed actions to the Executive Officer that describes the BMPs that are currently being implemented and additional BMPs that will be implemented to further reduce nutrients that are causing or contributing to the failure to attain nutrient source reduction goals.
3.) The report may be incorporated in the annual report unless the Executive Officer directs a different submittal date.

vi. If necessary, the Permittees shall update Section 13 of the DAMP to incorporate appropriate tasks in compliance with the approved TMDLs.

vii. As Part of the Permittees' next ROWD (permit renewal application), the Permittees must evaluate their compliance with the approved TMDLs and propose any new or modified BMPs necessary to achieve compliance with the WLAs in the TMDLS by the dates specified in the TMDLs.

VII. RECEIVING WATER LIMITATIONS

A. Urban Runoff discharges from the Permittees' MS4 shall not cause or contribute to exceedances of Receiving Water Quality Standards (as defined by Beneficial Uses and water quality objectives in Chapter 4 of the Basin Plan) for surface waters or ground waters.

B. The DAMP and its components, including the LIPs, must be designed to achieve compliance with Receiving Water Limitations associated with discharges of Urban Runoff to the MEP. It is expected that compliance with Receiving Water Limitations will be achieved through an iterative process and the application of increasingly more effective BMPs.

C. The Permittees shall comply with Sections VII.A of this Order through timely implementation of control measures and other actions to reduce pollutants in Urban Runoff in accordance with the DAMP and other requirements of this Order, including modifications thereto.

D. Upon a determination by either the Permittees or the Executive Officer that a discharge from the MS4 is causing or contributing to an exceedance of an applicable water quality standard, the Permittees shall:

1. Within two (2) working days, provide oral or e-mail notice to the Executive Officer of the location within its jurisdiction where the exceedance occurred and describe the nature of the exceedance.

2. Following oral or e-mail notification, a pollutant source investigation and control plan must be developed and implemented. This plan must be submitted to the Executive Officer within thirty (30) calendar days of becoming aware of the situation. If the exceedance is detected as part of the preparation of the annual monitoring report, the plan can be included in the Annual Report, if submitted within the 30 day period. The plan submitted for review and approval must at a minimum:

   a. Describe the BMPs that are currently being implemented and the additional BMPs that will be implemented to prevent or reduce those Pollutants that are causing or contributing to the exceedance of the applicable receiving water quality standards.

   b. Address the cause of the impairment or exceedance, and the technical and economic feasibility of control actions available to the Permittees to reduce or eliminate the impairment or exceedance consistent with the MEP standard.

   c. Include a BMP implementation schedule.

   d. Contain a comparative analysis of the Permittees' monitoring data to the applicable water quality objectives specified in Chapter 4 of the Basin Plan.

   e. A status report on the effectiveness of the pollution source investigation and control plan implementation to address exceedance of water quality objectives or elevated pollutant levels above benchmark values may be incorporated in the Annual Report unless the Executive Officer directs a different submittal date. The transmittal letter shall indicate that the Annual Report contains a description of additional BMPs proposed, pollution investigation report, and/or pollution source investigation and control plan.

3. If the exceedance is solely due to discharges to the MS4 from activities or areas outside the Permittees jurisdiction or control, the Permittees must, within two (2) working days of becoming aware of the situation, provide oral or e-mail notice to the Executive Officer of the determination of the exceedance and provide written documentation of these discharges to the Executive Officer within ten (10) calendar days of becoming aware of the situation.

4. The Executive Officer may by written notice require modifications to the plan and/or report, required by Subsection VII.D.2, above. If required, such modifications must be submitted within thirty (30) calendar days of receipt of said written notice.

5. Within ninety (90) calendar days following approval by the Executive Officer of the pollutant source investigation and control plan required by Subsection VII.D.2, the Permittees must revise the DAMP and their monitoring and reporting programs to incorporate the approved, modified, or additional BMPs that were implemented.

6. The revised DAMP and monitoring program are to be implemented in accordance with the proposed schedule, above, until approved or modified by the Executive Officer.

7. So long as the Permittees have complied with the procedures set forth above and are implementing the revised DAMP, the Permittees do not have to repeat the same procedure for continuing or recurring exceedance of the same Receiving Water Limitation unless the Executive Officer determines it is necessary to develop additional BMPs and provides written notice to the Permittees of this determination.

8. Nothing in Section VII.D prevents the Regional Board from enforcing any provision of this Order while the Permittee prepares and implements the above report.

VIII. LEGAL AUTHORITY/ENFORCEMENT

A. The Permittees shall maintain adequate legal authority to control the contribution of Pollutants to the MS4 and enforce those authorities. This may be accomplished through ordinance, statute, permit, contract or similar means. Such legal authority must at a minimum include and authorize the Permittees to:

   1. Control the contribution of Pollutants in discharges of Urban Runoff to the MS4 from sources within its jurisdiction.

   2. Prohibit all Illicit Discharges within and under the Permittee's jurisdiction not otherwise allowed pursuant to Section V;

   3. Prohibit and eliminate Illicit Connections to the Permittees MS4;

   4. Control the discharge of spills, dumping, or disposal of materials other than storm water to the MS4;

   5. Carry out all inspections, surveillance, and monitoring necessary to determine compliance and noncompliance with local ordinances and permits. The Permittee must have authority to enter, monitor, inspect, take measurements, review and copy records, and require regular reports from industrial, commercial, and

construction sites discharging into the MS4 within the limits of its statutory authority;

6. Enforce compliance with the Permittees' Storm Water Ordinances, permits, contracts, or Orders;

7. Stop Pollutant discharge or threat of discharge if a discharger is unable or unwilling to correct significant non-compliance;

8. Recover its cost to correct a discharger's significant non-compliance or to respond to immediate and serious threat to water quality violations through various mechanisms, such as forfeiture of permit deposits, trust funds/bonds or other short-term funding sources to allow municipalities to immediately address and remedy serious water quality violations at construction, industrial, or commercial sites;

9. Require the use of BMPs to prevent or reduce the discharge of pollutants into MS4s consistent with the MEP standard.

10. Require documentation on the effectiveness of BMPs implemented to reduce the discharge of Pollutants to the MS4;

11. The Permittees' Storm Water Ordinances or other local regulatory mechanisms shall include sanctions to ensure compliance. Sanctions shall include but are not limited to: oral and/or written warnings, notice of violation or non-compliance, administrative compliance orders, stop work or cease and desist order, a civil citation or injunction, the imposition of monetary penalties or criminal prosecution (infraction or misdemeanor). These sanctions shall be issued in a decisive manner within a predetermined timeframe, from the time of the violation's occurrence and/or follow-up inspection.

B. The Permittees shall take progressive and decisive enforcement actions against violators of their Storm Water Codes and Ordinances, in accordance with the federal storm water regulations (40CFR, Part 122.26(d)(2)(I)(A-F)), and adopted/established guidelines and procedures as described in Section 3.4 of the DAMP. The Permittees shall consider the time to return to compliance as one measure of effectiveness of their ordinances or enforcement response procedure. The Permittees shall document these actions in their databases and annual reports.

C. The Permittees shall use the most effective tool(s) at their disposal (such as Stop Work Orders and suspended inspections) to achieve immediate compliance with enforcement actions. Permittees must have the ability to enforce violation of the Stop Work Order by either an automatic fine or other effective means.

D. Within two (2) years of adoption of this Order, the Permittees shall promulgate ordinances that would specify BMPs for known pathogen or bacterial indicator sources such as animal wastes if those types of sources are significant within their jurisdiction.

E. The Permittees shall continue to provide notification to the Executive Officer of storm water related information obtained during site inspections of construction and industrial sites regulated by the Storm Water General Permits and of sites that should be regulated under the State's General Permits. The notification should include perceived violations of the Storm Water General Permits or local requirements, prior history of violations of the Permittee's Storm Water Ordinance, enforcement actions related to the Storm Water Ordinance taken by the Permittee, and other relevant information. In addition, Sections X.B., X.C. X.D of this Order address additional notification requirements for construction, industrial and commercial sites not covered under the Storm Water General Permits.

F. The Permittees shall continue with their enforcement actions for any violations of their ordinances after appropriate notification of the Executive Officer.

G. The Permittees shall specify conditions in interagency agreements or other documents for accepting urban storm water into their MS4s from owners of other MS4 systems, such as school and college districts, universities, Caltrans, the Department of Defense, or Native American Tribes.

H. The Permittees shall annually review their water quality ordinances and provide findings within the Annual Report each year on the effectiveness of these ordinances and enforcement programs in prohibiting the following types of discharges to the MS4s (the Permittees may propose appropriate control measures in lieu of prohibiting these discharges, where the Permittees are responsible for ensuring that dischargers adequately maintain those control measures):

1. Sewage, where a co-permittee operates the sewage collection system (also prohibited under the Statewide SSO order[34]);
2. Wash water resulting from the hosing or cleaning of gas stations, auto repair garages, and other types of automobile service stations;
3. Discharges resulting from the cleaning, repair, or maintenance of any type of equipment, machinery, or facility, including motor vehicles, concrete mixing equipment, portable toilet servicing, etc.;
4. Wash water from mobile auto detailing and washing, steam and pressure cleaning, carpet/upholstery cleaning, pool cleaning and other such mobile commercial and industrial activities;

[34] State Board WQO No. 2006-0003.

5. Water from cleaning of municipal, industrial, and commercial sites, including parking lots, streets, sidewalks, driveways, patios, plazas, work yards and outdoor eating or drinking areas, etc.;
6. Runoff from material storage areas or uncovered receptacles that contain chemicals, fuels, grease, oil, or other hazardous materials[7];
7. Discharges of runoff from the washing of toxic materials[8] from paved or unpaved areas;
8. Discharges of pool or fountain water containing chlorine, biocides, or other chemicals; pool filter backwash containing debris and chlorine;
9. Pet waste, yard waste, litter, debris, sediment, etc.; and,
10. Restaurant or food processing facility wastes such as grease, floor mat and trash bin wash water, food waste, etc.

I. Consistent with the Schedule required in Section III.A.t, each Permittee shall submit a certification statement in its Annual Report, signed by its legal counsel, that the Permittee has obtained all necessary legal authority in accordance with 40 CFR 122.26(d)(2)(i) (A-F) and to comply with this Order through adoption of ordinances and/or municipal code modifications. A copy of the certification shall also be placed in the LIP.

J. Annually thereafter, Permittees shall review adequacy of their ordinances and implementation and enforcement response procedures with respect to the above items. The findings of these reviews, along with supporting details and recommended corrective actions and schedules shall be submitted as part of the annual report for the corresponding reporting period. The LIP shall be updated accordingly.

IX. ILLICIT CONNECTIONS/ILLEGAL DISCHARGES (IC/ID); LITTER, DEBRIS AND TRASH CONTROL

A. The Co-Permittees have been extended necessary legal authority through California statutes and local charters. Consistent with this statutory authority, each of the Co-Permittees have adopted their respective Storm Water Ordinances. The Co-Permittees must continue to prohibit IC/IDs to the MS4 through their Storm Water Ordinances and the Principal Permittee must do so through its statutory authority. In addition, the Permittees must continue to implement and improve routine inspection and monitoring and reporting programs for their MS4s. If routine inspections or dry weather monitoring indicate IC/IDs, they must be investigated and eliminated or

[7] Hazardous material is defined as any substrate that poses a threat to human health or the environment due to its toxicity, corrosiveness, ignitability, explosive nature or chemical reactivity. These also include materials named by EPA to be reported if a designed quantity of the material is spilled into the waters of the United States or emitted into the environment.
[8] Toxic material is a chemical or a mixture that may present an unreasonable risk of injury to health or the environment.

permitted within sixty (60) calendar days of receipt of notice by its staff or from a third party.

B. The Permittees upon being put on notice by staff or a third party must immediately (within 24 hours of receipt of notice by its staff or from a third Party) investigate all spills, leaks, and/or illegal discharges to the MS4s. Based upon their assessment and as specified below, the Permittees must provide notifications and reporting as described in Section 4 of the DAMP and Section XV of this Order.

C. Within 12 months of adoption of this Order, the Permittees shall review and revise their IC/ID program to include a pro-active illegal discharge detection and elimination program (IDDE) using the Guidance Manual for Illicit Discharge, Detection, and Elimination by the Center for Watershed Protection[35] or any other equivalent program. The result of this review shall be reported in the Annual Report for that reporting period and include a description of the Permittees' revised pro-active program, procedures and schedules. The LIP shall be updated accordingly.

D. The Permittees' revised IC/ID and IDDE programs shall specify a plan for each jurisdiction to conduct focused, systematic field investigations, outfall reconnaissance inventory, indicator monitoring at storm water sampling points, if applicable, and tracking of discharges to their sources[36] . The focused reconnaissance and inventory of the MS4 and outfalls shall be completed for each Permittee's jurisdiction by the end of the permit term with at least 50% completed within three years of adoption of this Order.

E. The Permittees shall link implementation of their IC/ID and IDDE programs with other Permittee programs and urban watershed protection efforts. These may include: a) use of GIS map of the Permittees' conveyance systems to track sources; b) aerial photography to detect IC/IDs; c) municipal inspection programs of construction, industrial, commercial, storm drain systems, municipal facilities, etc.; d) analysis of watershed monitoring and other indicator data; e) watershed education to educate the public about illegal discharges; f) pollution prevention for generating sites; g) stream restoration efforts/opportunities; and h) rapid assessment of stream corridors to identify dry weather flows and illegal dumping.

F. The Permittees shall identify in their LIP the staff positions responsible for different components of their IC/ID and IDDE programs.

---

[35] USEPA (Illicit Discharge Detection and Elimination - A Guidance Manual for Program Development and Technical Assessments) by the Center for Watershed Protection and Robert Pitt, University of Alabama, October 2004, updated 2005).

[36] Table 2: Land uses, Generating Sites and Activities that Produce Indirect Discharges from IDDE, A Guidance Manual for Program Development and Technical Assessments, October 2004 CWP.

G. The Permittees shall annually review and evaluate their IC/ID and IDDE program to determine if progress is being made through measurable goals or if implementation strategies need to be adjusted. Findings of the review and evaluation shall be submitted with the Annual Report.

H. The Permittees shall maintain a database that identifies both permitted and status of un-permitted connections resulting from implementation of its IC/ID and IDDE programs including routine inspections and dry weather monitoring. This information shall be updated on an ongoing basis and submitted with the Annual Report.

I. The Permittees shall control, consistent with the MEP standard, the discharge of spills, leaks, or dumping of any materials other than storm water and authorized non-storm water per Section IV, above, into the MS4s. All reports of spills, leaks, and/or illegal dumping shall be promptly investigated and reported as specified under Section XV (Notification Requirements).

J. In the 2004-2005 Annual Report, the Permittees characterized trash, determined its main source(s) and developed and implemented appropriate BMPs and control measures to reduce and/or to eliminate the discharge of trash and debris to Waters of the U.S. to the MEP. These control measures should be continued and their effectiveness must be reported in the Annual Report.

K. The Permittees shall annually review their litter/trash control measures to determine the need for any revision. The findings of this review shall be included in the Annual Report.

L. Where non-jurisdictional IC/IDs are identified, the Permittees will notify the responsible party and the Executive Officer of the discharge.

M. The Permittees shall control, to the MEP, the discharge of spills, leaks, or dumping of any materials other than storm water and authorized non-storm water per Section VI, above, into the MS4s. All reports of spills, leaks, and/or illegal dumping shall be promptly investigated and reported as specified under Section XVI.

X. SEWAGE SPILLS, INFILTRATION INTO THE MS4 SYSTEMS FROM LEAKING SANITARY SEWER LINES, SEPTIC SYSTEM FAILURES, AND PORTABLE TOILET DISCHARGES

A. The Permittees shall continue to provide local sanitation districts 24-hour access to the MS4s to address sewage spills. The Permittees shall continue to work cooperatively with the local sewer agencies to determine and control the impact of infiltration from leaking

sanitary sewer systems on Urban Runoff quality. Each Permittee shall implement control measures necessary to minimize infiltration of seepage from sanitary sewers to the MS4 through routine preventative maintenance of the MS4.

B. The Permittees shall implement management measures and procedures to prevent, respond to, contain and clean up all sewage spills that may discharge into its MS4 from any source. Management and/or preventive measures shall also be implemented for sources including portable toilets and failing septic systems that are causing or contributing to Urban Runoff pollution problems in Permittee jurisdictions.

C. The Permittees shall collaborate with the local sewering agencies to review and revise, as needed, the Sanitary Sewer Overflow Response Plan to insure its consistency with the SSO Order.

D. The interagency or interdepartmental sewer spill response coordination within each Permittee's jurisdiction shall be described in the LIP.

E. Within 2 years of adoption of this Order, Permittees with septic systems in their jurisdiction shall develop an inventory of septic systems within its jurisdiction and establish a program to ensure that failure rates are minimized pending adoption of regulations as per Assembly Bill 885[37] regarding onsite waste water treatment systems.

XI. MUNICIPAL INSPECTION PROGRAMS

The Permittee inspection programs are outlined in Sections 7 and 8 of the DAMP and describe some of the minimum inspection and enforcement procedures utilizing existing inspection programs, provides criteria for characterizing the significance of violations, criteria for prioritizing violations, appropriate response actions corresponding to the priority of violations and identifies the hierarchy of enforcement/compliance responses. Section 3.4 of the DAMP provides a framework to standardize the implementation and enforcement by the Co-Permittees of their respective Storm Water Ordinances. The Co-Permittees shall continue to enforce their respective Storm Water Ordinances consistent with the DAMP and this Order.

A. GENERAL REQUIREMENTS

1. The Permittees shall continue to maintain and update an inventory of all construction, industrial, and commercial facilities within their jurisdiction that have a reasonable potential to discharge pollutants to the MS4 regardless of whether the sites are subject to the California Statewide General NPDES Permit for Storm

[37] http://www.waterboards.ca.gov/water_issues/programs/septic_tanks/

Water Discharges Associated with Construction Activities or the California Statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities or other individual NPDES permit or Waste Discharge Requirements.

2. The municipal inspection inventory shall be maintained in an electronic database available to the public. The database system must include relevant information on ownership, Standard Industrial Classification (SIC) codes, General Permit Waste Discharge Identification (WDID) number (if any), size, Geographic Information System (GIS) data in NAD83/WGS84[38] compatible formatting with latitude/longitude in decimal degrees, and other pertinent details describing the nature of activities at the site. The database shall also include a record of inspection dates, the results of each inspection, and a summary of any enforcement actions taken. The database shall be updated on an annual basis and an electronic copy shall be provided with each Annual Report.
3. The Permittees shall verify during inspections and prior to local permit issuance whether a site has obtained necessary permit coverage under one or more of the General Statewide Permits, an individual NPDES permit, Waste Discharge Requirements, and/or 401 Certification. Local permits shall not be granted until coverage under the necessary state permit(s) is verified.
4. The Permittees shall deem facilities operating without a proper permit to be in significant non-compliance. Appropriate enforcement measures shall be implemented including a time schedule to obtain coverage, or suspension of business license until evidence of permit coverage is provided. Non-filers shall be reported within 14 calendar days to the Regional Board by electronic mail or other written means. The Permittees shall specify the non-filer verification and Regional Board notification procedures in their LIP. Notification information shall be consistent with Section XV.
5. Within 24 months of adoption of this Order, each Permittees shall have its inspection and enforcement information available through an electronic database available to the public. At a minimum, this database should include: the inspection dates, inspectors present, adequacy of site plans, any observed violations, corrective actions required, any enforcement actions and follow-up actions taken by the Permittee, date compliance was achieved, prior history of violations, and any other relevant information.
6. Permittees shall maintain hard or electronic copies and make available upon request all information related to its inspections, observed violations and enforcement actions including photographs, videotapes, notices of correction or any other enforcement action. This information shall be linked to the electronic database identified in Section X.A.2 above.

[38] NAD83/WGS84=North American Datum of 1983 and World Geodetic System of 1984 are systems to define three dimensional coordinates of a single physical point.

7. The Permittees need not inspect facilities already inspected by Regional Board staff if the inspection was conducted within the specified time period. Regional Board staff inspection information is available at www.ciwqs.ca.gov[39].
8. Each Permittee shall respond to complaints received from third parties in a timely manner to ensure that the construction, industrial and commercial sites are not a source of pollutants in the MS4s and the Receiving Waters.
9. The Permittees shall enforce their ordinances and permits at all construction, industrial, and commercial facilities in a fair, firm and consistent manner. Sanctions for non-compliance as required under Section VII (Legal Authority/Enforcement) shall be adequate to bring the site into compliance with this Order.
10. Each Permittee shall document, evaluate and annually report the effectiveness of its enforcement procedures in achieving prompt and timely compliance. When timely compliance is not achieved, each Permittee shall take appropriate corrective measures to immediately prevent or abate the discharge of pollutants into its MS4s or into Receiving Waters within its jurisdiction.
11. The Principal Permittee and the County have implemented the Compliance Assistance Program (CAP). Through the Riverside County Department of Environmental Health, the CAP addresses storm water compliance issues at restaurant facilities and businesses that must have a hazardous material permit for either storing, handling or generating hazardous materials. As described in Section 8 of the DAMP, the Permittees must either participate in the CAP or implement an equivalent inspection program. The cities of Corona and Riverside maintain such programs through their respective POTW pre-treatment programs that may be supplemented by the activities of the Department of Environmental Health during routine inspections. The County is establishing a stand alone NPDES Storm water Compliance Inspection and Enforcement Program (CIEP) for industrial/commercial facilities in the unincorporated areas of the County.
12. Where storm water inspections and/or enforcement required by this Order are carried out on behalf of the Permittee by other agencies or departments such as the County Department of Environmental Health, county and local fire departments, hazardous materials programs, code enforcement, industrial pretreatment, and building and safety, the Permittee shall monitor and annually evaluate and report adequacy of program coverage and enforcement response in complying with this Order.
13. All storm water inspectors shall be trained in accordance with Section XV.

[39] To obtain access to the State database, registration at the following link is necessary: http://www.waterboards.ca.gov/water_issues/programs/ciwqs/chc_npdes.shtml. Contact information is available at http://www.waterboards.ca.gov/water_issues/programs/ciwqs/contactus.shtml.

B. CONSTRUCTION SITES

1. Each Permittee shall include in the electronic database identified in Section XI.A.2 an inventory of all construction sites within its jurisdiction for which building or grading permits have been issued and activities at the site include: soil movement; uncovered storage of materials or wastes, such as dirt, sand or fertilizer; or exterior mixing of cementaceous products, such as concrete, mortar or stucco.

2. Each Permittee shall continue to prioritize construction sites within its jurisdiction as a high, medium or low threat to water quality. Evaluation of construction sites shall be based on factors, which shall include but not be limited to: soil erosion potential, project size, proximity and sensitivity of Receiving Waters and any other relevant factors. At a minimum, high priority construction sites shall include: sites 50 acres and greater; sites over 1 acre that discharge directly to waters with approved TMDLs or Clean Water Act Section 303(d) listed waters for sediment or turbidity impairments; site specific characteristics[40] ; and any other relevant factor. At a minimum, medium priority construction sites shall include: sites between 10 to less than 50 acres of disturbed soil.

3. Each Permittee shall conduct construction site inspections for compliance with its ordinances (grading, Water Quality Management Plans, etc.) and local permits (construction, grading, etc.). The Permittees shall develop a checklist for conducting site inspections. Inspections of construction sites shall include, but not be limited to:

    a. Verification of coverage under the General Construction Permit (Notice of Intent [NOI] or Waste Discharge Identification Number [WDID]) during the initial inspection. Permit coverage shall also be confirmed in the event of a change in ownership.
    b. Review of the Grading Plans and Erosion and Sediment Control Plans (ESCP) to ensure that the BMPs implemented on-site are up-to-date and consistent with the appropriate phase of construction (Preliminary Stage, Mass Grading Stage, Streets and Utilities Stage etc.).
    c. Visual observations for non-storm water discharges, potential illicit connections, and potential pollutants sources.
    d. Determination of compliance with local ordinances, permits, Water Quality Management Plans and other requirements, including the implementation and maintenance of BMPs required under local requirements.
    e. An assessment of the effectiveness of BMPs implemented at the site and the need for any additional BMPs. BMP effectiveness assessment shall consider applicable action levels (AL) and/or numeric effluent limits (NEL) published by the State Board or USEPA.

[40] The draft General Construction Permit includes risk-based characterization of construction sites based on site-specific conditions.

4. At a minimum, the inspection frequency shall include the following:

   a. During the wet season (i.e., October 1 through May 31 of each year), all high priority sites are to be inspected, in their entirety, once a month. All medium priority sites are to be inspected at least twice during the wet season. All low priority sites are to be inspected at least once during the wet season. When BMPs or BMP maintenance is deemed inadequate or out of compliance, an inspection frequency of once per week should be maintained until BMPs and BMP maintenance are brought into compliance.

   b. During the dry season (i.e., June 1 through September 30 of each year), all construction sites shall be inspected at a frequency sufficient to ensure that sediment and other pollutants are properly controlled and that unauthorized, non-storm water discharges are prevented.

5. The Permittees' implementation of their construction storm water program shall be consistent with the latest version of the statewide General Construction Permit and the federal effluent guideline limitations, if any. At the time of drafting of this Order, action levels and numeric effluent limits were under consideration as part of the most recent draft of the General Construction Permit and the USEPA has released its draft federal effluent guideline limitations for construction sites.

6. Should it be determined by the Permittee that any applicable action levels or effluent guideline limitations are exceeded, the Permittee shall require the discharger to immediately implement additional BMPs and revise its ESCP.

.

C. INDUSTRIAL FACILITIES

1. To establish priorities for inspection, the Permittees shall continue to prioritize industrial facilities within their jurisdiction as a high, medium, or low threat to water quality. Continual evaluation of these facilities should be based on such factors as type of industrial activities (SIC codes)[41], materials or wastes used or stored outside, pollutant discharge potential, compliance history, facility size, proximity and sensitivity of Receiving Waters and any other relevant factors. At a minimum, a high priority shall be assigned to: facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA); facilities that handle or generate pollutants for which the receiving water is impaired, facilities that have a significant potential to release pre-production plastics or nurdles into the environment, and facilities with a high potential for or history of unauthorized, non-storm water discharges.

[41]Industrial Facilities, as defined at 40 CFR § 122.26(b)(14), including those subject to the General Industrial Permit or other individual NPDES permit;

2. Each Permittee shall conduct industrial facility inspections for compliance with its ordinances, permits and this Order. Industrial inspections shall be consistent with the requirements of the CAP program contained in Section 8.4 of the DAMP, to include a review of the site's material and waste handling and storage practices, written documentation of pollutant control BMP implementation and maintenance procedures, digital photographic documentation of water quality violations as well as evidence of past or present unauthorized, non-storm water discharges and enforcement actions issued at the time of inspection. Report of inspections shall be included in the annual report and shall document the basis for downgrading or upgrading priority ranking of industrial sites for each annual reporting year.
3. All high priority industrial facilities are to be inspected at least once a year; all medium priority sites are to be inspected at least once every two years; and all low priority sites are to be inspected at least once per permit cycle. In the event that inappropriate material or waste handling or storage practices are observed, or unauthorized, non-storm water discharges are observed, an enforcement order shall be issued and a re-inspection frequency adequate to bring the site into compliance must be maintained (at a minimum, once a month or within the compliance schedule prescribed by the Permittee in a written notice to the discharger). Once compliance is achieved, a minimum inspection frequency of once every six months should be maintained for the annual reporting period.
4. Each Permittee shall continually identify any industrial facilities within its jurisdiction and shall add them to the database, as identified in Section XI.A.2. Additionally, each facility shall be listed as per the criteria in specified in Section XI.C.1 within 15 days from the initial date of discovery of the facility.
5. Each Permittee shall require industrial facilities to implement source control and pollution prevention measures consistent with the BMP Fact Sheets developed by the Permittees.

D. COMMERCIAL FACILITIES

1. Each Permittee shall continue to implement the CAP or equivalent, pursuant to Section 8.4 of the DAMP and Section XI.A.10 of this Order;
2. The Permittees shall continue to develop BMPs applicable for each of the commercial operations described above.
3. The Permittees shall continue to prioritize commercial facilities/businesses within their jurisdiction as a high, medium, or low threat to water quality based on such factors as the type, magnitude, and location of the commercial activity, proximity and sensitivity of Receiving Waters, potential for discharge of pollutants to the MS4, facilities that handle or generate pollutants for which the Receiving Water is

impaired, and facilities with a high potential for or history of unauthorized, non-storm water discharges.

4. All high priority sites shall be inspected at least once per year; all medium priority sites shall be inspected at least every two years; and all low priority sites shall be inspected at least once per permit cycle. At a minimum, each facility shall be required to implement source control and pollution prevention measures consistent with the BMP Fact Sheets developed by the Permittees. CAP (or equivalent) follow-up inspections should include a review of control measures implemented, their effectiveness and maintenance; written and photographic documentation of materials and waste handling and storage practices; evidence of past or present unauthorized, non-storm water discharges; and an assessment of management/employees awareness of storm water pollution prevention measures.
5. In the event that inappropriate material or waste handling or storage practices are observed, or there is evidence of past or present unauthorized, non-storm water discharges, a written enforcement order shall be issued at the time of the initial inspection for CAP equivalent inspection programs or at the time of the CAP follow-up inspection, to bring the site into compliance.
6. Within 18 months of adoption of this Order, the Co-Permittee shall notify all mobile businesses operating within their jurisdiction concerning the minimum source control and pollution prevention measures that they must develop and implement. For purposes of this Order, mobile businesses include: mobile auto washing/detailing; equipment washing/cleaning; carpet, drape, furniture cleaning; and mobile high pressure or steam cleaning. The mobile businesses shall be required to implement appropriate control measures within 3 months of being notified by the Co-Permittees.
7. Within 24 months of adoption of this Order, the Permittees shall develop an enforcement strategy to address mobile businesses.
8. The Permittees should continue to maintain a restaurant inspection program, or coordinate and collaborate with the Riverside County Environmental Health Department's restaurant inspection program. The restaurant inspection program shall, at a minimum, address:
   a. Oil and grease disposal to verify that these wastes are not poured onto a parking lots, streets or adjacent catch basins;
   b. Trash bin areas, to verify that these areas are clean, the bin lids are closed, the bins are not used for liquid waste disposal and the bins are not washed with the wash water is disposed of into the MS4s;
   c. Parking lot, alley, sidewalk and street areas to verify that floor mats, filters and garbage containers are not washed in those areas and that no wash water is disposed of in those areas;
   d. Parking lot areas to verify that they are cleaned by sweeping, not by hosing down, and that the facility operator uses dry methods for spill cleanup; and,

e. Inspection of existing devices designed to separate grease from wastewater (e.g., grease traps or interceptors) to ensure adequate capacity and proper maintenance as per the Fats, Oils and Grease (FOG) program (the FOG inspections conducted under the Statewide SSO order (Water Quality Order No. 2006-0003) could be substituted for this inspection).

f. All violations of the Water Quality Ordinance shall be enforced by the Permittees and all violations of the Health and Safety Code should be enforced by the Public Health Agency.

E. RESIDENTIAL PROGRAM

1. Within 12 months of adoption of this Order, each Permittee shall develop and implement a residential program to reduce the discharge of pollutants from residential facilities to the MS4s, consistent with the MEP standard.
2. The Permittees shall identify residential areas and activities that are potential sources of pollutants and develop Fact Sheets/BMPs. At a minimum, this should include: residential auto washing and maintenance activities; use and disposal of pesticides, herbicides, fertilizers and household cleaners; and collection and disposal of pet wastes. The Permittees shall distribute the Fact Sheets/BMPs and the latest research information from organizations such as the Riverside County Resource Conservation District[42] and USDA's Backyard Conservation Program[43] to the residents to ensure that discharges from the residential areas are not causing or contributing to a violation of water quality standards in the receiving waters.
3. The Permittees, collectively or individually, shall facilitate the proper collection and management of used oil, toxic and hazardous materials, and other household wastes. Such facilitation should include educational activities, public information activities, and establishment of curbside or special collection sites managed by the Permittees or private entities, such as solid waste haulers.
4. The Permittees shall develop and implement control measures for common interest areas and areas managed by homeowner associations or management companies. The Regional Board recommends continuation of Permittee efforts to coordinate with local water purveyors and other stakeholders to encourage efficient irrigation and minimize runoff.

[42] The Riverside County Resource Conservation District (RCRCD) provides gardening and horticulture information appropriate for the area including native plant selection, backyard management, alternatives to pesticide, irrigation scheduling and composting. The RCRCD is sponsored by the cities and county of Riverside Storm water/Clean Water Protection Program.

[43] Backyard Conservation, Bringing Conservation from the Countryside to Your Backyard, USDA Natural Resources Conservation Service, National Association of Conservation Districts, Wildlife Habitat Council and National Audubon Society.

5. The Permittees shall enforce their Water Quality Ordinance for all residential areas and activities. The Permittees should encourage new developments to use weather-based evapotranspiration (ET) irrigation controllers[44].
6. Each Permittee shall include an evaluation of its residential program in the Annual Report starting with the second Annual Report after adoption of this Order.

XII. NEW DEVELOPMENT (INCLUDING SIGNIFICANT REDEVELOPMENT)

A. GENERAL REQUIREMENTS:

1. Each Co-Permittee, consistent with the DAMP, LIP, WQMP, Storm Water Ordinances, and requirements of this Order, when considering any map or permit for which discretionary approval is sought, must require such map or permit to obtain coverage under the General Construction Permit, if if the disturbed area is less than one acre and part of a larger plan of development or if the disturbed area is one acre or greater, by filing a Notice of Intent (NOI) with the State Board. Each Co-Permittee shall specify its verification procedure and any tools utilized for this purpose in its LIP.

2. Each Permittee must continue to implement those BMPs identified in Section 7.1 of the DAMP in its review of any map or permit for which discretionary approval is sought. Each Permittee shall ensure that the erosion and sediment control plans it approves include appropriate erosion and sediment control BMPs (i.e., erosion measures for slopes greater than a certain length or hill-side developments, ingress/egress controls, perimeter controls, run-on diversion, if significant) such that a distinct and effective combination of BMPs consistent with site risk is implemented through all phases of construction.

3. Each Permittee shall utilize the BMP studies conducted during the third term permit to determine the most appropriate erosion and sediment control BMPs. Each Permittee shall specify in the LIP its legal authority and methods to incorporate the most appropriate BMPs for building, grading, and similar permits.

4. The land use approval process of each Permittee must continue to require post-construction BMPs, source control BMPs and Treatment Control BMPs and identify their locations and long-term maintenance responsibilities consistent with the requirements of this Order.

[44] Westpark Study, Municipal Water District of Orange County, Irvine Ranch Water District and Metropolitan Water District of Southern California, 2001.

5. Each Permittee shall ensure, consistent with the MEP standard, that runoff from New Development and Significant Redevelopment projects not regulated under this Order but that require encroachment permits for connections to the MS4 regulated under this Order are consistent with the requirements of this Order including the model WQMP for the Permit Area.

6. Each Permittee shall ensure that appropriate control measures to reduce erosion and maintain natural stream geomorphology are included in the design for replacement of existing culverts or construction of new culverts and/or bridge crossings.

7. Each Permittee shall minimize the short and long-term adverse impacts on Receiving Water quality from New Development and Significant Redevelopment maps or permits where discretionary approval is sought, as required in Section XII.D (Water Quality Management Plan) below, by: (1) continuing to review, approve, and verify implementation of project-specific WQMPs, emphasizing implementation of LID principles; (2) addressing hydrologic conditions of concern; and (3) ensuring that long term operation and maintenance mechanisms are in place prior to project closure or issuance of certificates of occupancy.

8. The requirements of Section XII.D below shall apply to Permittee projects that meet the New Development and Significant Redevelopment criteria.

9. Each Permittee shall participate in the development of a Watershed Action Plan, described in Section XII.B, below, to integrate water quality, stream protection and storm water management and re-use within the Permit Area with land use planning policies, ordinances, and plans.

B. WATERSHED ACTION PLAN

1. An integrated watershed management approach may facilitate integration of planning and project approval processes with water quality and quantity control measures. Management of the impacts of urbanization on water quality and stream stability in the Permit Area is more effectively done on a per-site, neighborhood and municipal basis based on an overall watershed plan. Pending completion of the Watershed Action Plan consistent with this section, management of the impacts of urbanization shall be accomplished on a per-project and per-jurisdiction basis through jurisdictional implementation of the watershed protection principles and project-specific WQMPs. The Permittees may choose to develop sub-watershed action plans based on the overall Watershed Action Plan in the future based on new 303(d) impairments, TMDL requirements, or other factors.

2. Within six months of adoption of this Order, the Principal Permittee shall facilitate the formation of a technical advisory committee (TAC) consisting of the Community

Development/Planning Department directors and City/County Engineers of the Permittees to develop a Watershed Action Plan and to address other issues related to urban and storm water runoff management and planning and approval processes within each jurisdiction. Each Permittee shall participate in this watershed effort to address cumulative impacts of development on vulnerable streams, preserve structure and function of streams in the Permit Area, and protect water resources, including groundwater recharge areas.

3. Within three years of Permit adoption, the Principal Permittee, in collaboration with the Co-Permittees and the TAC shall develop the Watershed Action Plan and implementation tools to address impacts of urbanization in a holistic manner. At a minimum, the Watershed Action Plan shall include the following:

   a. Integrate water quality, water supply, habitat protection, stream protection, Urban Runoff management, LID, water conservation and re-use and flood protection within the Permit Area with land use planning policies and ordinances. The Plan shall identify existing Regional Planning and Coordination Efforts that link to Water Quality (e.g. Western Riverside County Multiple Species Conservation Plan, TMDL Task Forces, Water Conservation Task Forces, Integrated Regional Watershed Management Plans). The Permittees shall describe how these efforts link to their Urban Runoff Programs and identify any further coordination that should be promoted to enhance comprehensive watershed management activities.

   b. Delineate existing unarmored or soft-armored drainages in the Permit Area that are vulnerable to hydromodification from development projects and the procedures to be followed to protect those areas from developmental impacts on a per project, sub-watershed, and watershed basis. The Watershed Action Plan should specify hydromodification management standards for each sub-watershed and provide assessment tools.

   c. Incorporate low impact development techniques, Smart Growth principles[45], New Urbanism[46], urban runoff capture, treatment, and re-use, water conservation principles in landscape choices and design, preservation of existing unarmored or soft-armored drainages and flood plains, and implementation tools and standards.

   d. Include development strategies that provide incentives for redevelopment, brownfield development, high density, vertical density, mixed use and transit-oriented development, and water conservation and re-use projects.

[45] Smart Growth refers to the use of creative strategies to develop ways that preserve natural lands and critical environmental areas, protect water and air quality, and reuse already-developed land.

[46] New Urbanism is somewhat similar to Smart Growth and is based on principles of planning and architecture that work together to create human-scale, walkable communities that preserve natural resources.

e. Specify control measures, for highly developed areas to prevent further degradation and restore functionality of streams consistent with the maximum extent practicable standard.

f. Specify development strategies that provide incentives for redevelopment, brownfield development, high density, vertical density, mixed use and transit-oriented development, and water conservation and re-use.

g. Includes effectiveness tools to determine the effectiveness of the strategies in minimizing the impacts on hydromodification and water quality.

h. Specify common development standards, zoning codes, conditions of approval and other principles and policies necessary for water quality protection.

i. Identify Impaired Waters [CWA § 303(d) listed] with and without adopted TMDLs, Pollutants causing impairment, monitoring programs for those Pollutants, control measures, including any BMPs that the Permittees are currently implementing, and any BMPs the Permittees are proposing to implement. In addition, if a TMDL has been developed and an implementation plan is yet to be developed, the DAMP shall specify that the responsible Permittees develop constituent specific source control measures, conduct additional monitoring and/or cooperate with the development of an implementation plan as required by the RWQCB.

j. Facilitate integrated planning for water quality/quantity that includes Urban Runoff management, stream channel and hydromodification management by developing maps of the impaired waters [CWA § 303(d) listed] and a GIS map of stream channels in the Permit Area that are vulnerable to hydromodification.

k. Specify monitoring requirements for hydromodification and water quality to evaluate the effectiveness of the control measures contained in the Watershed Action Plan.

l. Invite participation and comments from water and utility agencies, state and federal agencies, non-governmental organizations and other interested parties in the development of the Watershed Action Plan for incorporation into the appropriate section of the DAMP.

4. Within three years of adoption of this Order, the The Watershed Action Plan shall be submitted to the Executive Officer for approval and incorporation into the DAMP. Within six months of approval, each Permittee shall implement applicable provisions of the approved revised DAMP.

C. INCORPORATION OF WATERSHED PROTECTION PRINCIPLES INTO CALIFONRIA ENVIONMENTAL QUALITY ACT (CEQA) AND PLANNING PROCESSES

1. Within twelve months of adoption of this Order, each Permittee shall review its General Plan and related documents including, but not limited to its Development Standards, Zoning Codes, Conditions of Approval and Development Project Guidance to determine how watershed protection principles and policies are considered and incorporated into project approval processes and to identify and eliminate any barriers to implementation. This review shall:

   a. Ensure that urban runoff issues and water quality considerations are properly considered and addressed during the planning process for each project. The potential need for CWA Section 401 certification for a project should be identified early in the CEQA review, if appropriate, to enable coordination with Regional Board 401 staff. The preliminary WQMP should identify the need for any CWA Section 401 certification. The CEQA document preparation processes should be revised to consider any significant short and long term adverse impacts that the project may have on urban storm water runoff quality and quantity and shall specify measures that must be implemented to avoid or mitigate those impacts, where feasible. If the proposed mitigation measures include structural treatment control system, then the CEQA document shall identify the responsible parties for the long term operation and maintenance activities and the funding mechanism.

   b. The following potential impacts shall be considered during CEQA review:

      i. Potential impact of project construction on storm water runoff.

      ii. Potential impact of project's post-construction activity on storm water runoff.

      iii. Potential for discharge of pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas.

      iv. Potential for changes in Urban Runoff quality and quantity that could have an impact on stream channels and the Beneficial Uses of the Receiving Waters.

      v. Potential for significant changes in the flow velocity and/or volume of Urban Runoff that could cause environmental harm.

      vi. Potential for significant increases in erosion of the project site or surrounding areas.

   c. Identify and recommend solutions to eliminate barriers to implementation of the watershed protection principles and policies, including but not limited to the low impact development principles (LID) and management of hydrologic conditions of concern in Section E, below. The results of this review along with any proposed action plans and schedules shall be reported in the annual report for the corresponding year. Any changes to the project approval process or

procedures shall be reflected in the LIP. The watershed protection principles and policies include the following:

i. Limit disturbance of natural water bodies and drainage systems; conserve natural areas; protect slopes and channels; minimize impacts from storm water and Urban Runoff on the biological integrity of natural drainage systems and water bodies;

ii. Minimize changes in hydrology and Pollutant loading; require incorporation of controls including structural and non-structural BMPs to mitigate any projected increases in Pollutant loads and flows; ensure that post-development runoff rates and velocities from a site do not adversely impact downstream erosion and stream habitat; minimize the quantity of Urban Runoff directed to impermeable surfaces and the MS4s; and maximize the percentage of permeable surfaces to allow more percolation of Urban Runoff into the ground;

iii. Preserve and where possible, create or restore areas that provide important water quality benefits, such as wetlands, riparian corridors, and buffer zones; establish reasonable limits on the clearing of vegetation from the project site;;

iv. Encourage the use of water quality wetlands, biofiltration swales, watershed-scale retrofits, etc., where such measures are likely to be effective and technically and economically feasible and not likely to create vector problems;

v. Provide for appropriate permanent measures to reduce pollutant loads in Urban Runoff from the development site; and

vi. Avoid development of areas that are particularly susceptible to erosion and sediment loss or establish development guidance and control measures to protect these areas from erosion and sediment loss.

2. The Principal Permittee, in collaboration with the TAC, shall develop common development standards, zoning codes, conditions of approval and other principles and policies necessary for water quality protection. Each Co-Permittee should incorporate appropriate provisions from these common development standards into its policies.

3. Each Permittee shall provide the Regional Board with the draft amendment or revision when a pertinent General Plan element or the General Plan is noticed for comment in accordance with Govt. Code § 65350 et seq.

D. WATER QUALITY MANAGEMENT PLAN (WQMP) FOR URBAN RUNOFF (FOR NEW DEVELOPMENT/ SIGNIFICANT REDEVELOPMENT):

1. Each Permittee shall continue to require project-specific Water Quality Management Plans (WQMP) for those maps and permits for which discretionary discretionary approval is sought, as defined below and described in Section 6 (Appendix O) of the DAMP. Within 12 months of adoption of this Order, the

Principal Permittee shall submit a revised WQMP to incorporate new elements required in this Order. The primary objective of the WQMP, by addressing site design, source control and treatment control BMPs applied on a regional, sub-regional or site specific basis, is to ensure that the land use approval process of each Co-Permittee will minimize Pollutant loads in Urban Runoff from project sites for a map or permit for which discretionary approval is given.

2. The project-specific WQMPs shall include site design, source control and/or treatment control BMPs or sub-regional or regional treatment systems to address pollutants and hydrologic conditions of concern. A WQMP is required for maps or permits for which discretionary approval is sought meeting the following criteria;

   a. *All significant re-development projects:* Significant re-development is defined as the addition creation, or replacement of 5,000 or more square feet of impervious surface on an already developed site. Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of the facility, or emergency redevelopment activity required to protect public health and safety. Where redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing developed site, and the existing development was not subject to WQMP requirements, the numeric sizing criteria discussed below applies only to the addition or replacement, and not to the entire developed site. Where redevelopment results in an increase of more than fifty percent of the impervious surfaces of a previously existing developed site, the numeric sizing criteria applies to the entire development.

   b. *New developments that create 10,000 square feet or more of impervious surface (collectively over the entire project site) including* commercial, industrial and residential developments. This includes: subdivisions creating 10 lots or units and more; subdivisions creating less than 10 lots or units, where the combined impervious surface area of the lots or units is equal to or greater than 10,000 square feet such as single family residences, multi-family residence, condominiums, apartments, etc.; non-residential developments such as: laboratories; recreational facilities; municipal facilities; mini-malls and shopping malls; hotels; office buildings; warehouses; automotive dealerships; airfields and industrial facilities mixed use and public projects This category includes development projects on public and private land, which fall under the planning and building authority of the Permittees.

   c. Automotive repair shops (with SIC codes 5013, 5014, 5541, 7532-7534, 7536-7539).
   d. Restaurants (with SIC code 5812) where the land area of development is 5,000

square feet or more.

e. Hillside developments of 5,000 square feet or more which are located on areas with known erosive soil conditions or where the natural slope is twenty-five percent or more.

f. Developments of 2,500 square feet of impervious surface or more adjacent to (within 200 feet) or discharging directly into ESAs such as or waterbodies listed on the CWA Section 303(d) list of impaired waters.

g. Parking lots of 5,000 square feet or more exposed to storm water. Parking lot is defined as land area or facility for the temporary parking or storage of motor vehicles used personally for business or commerce.

h. Streets, roads, highways and freeways of 5,000 square feet or more of paved surface shall incorporate USEPA Guidance, "Managing Wet Weather with Green Infrastructure: Green Streets" to the MEP. This category includes any paved surface used for the transportation of automobiles, trucks, motorcycles, and other vehicles and excludes any routine road maintenance activities where the footprint is not changed. As public works projects fitting this category have special limitations, the Permittees may propose a custom WQMP criteria and process for these projects that must be reviewed and approved by the Executive Officer.

i. Retail Gasoline Outlets (RGOs) that are either 5,000 sq feet or more, or has a projected average daily traffic of 100 or more vehicles per day.

j. Emergency public safety projects in any of the above-listed categories may be excluded if the delay caused due the requirement for a WQMP compromises public safety, public health and/or environmental protection.

3. WQMPs shall reflect consideration of the following goals, which may be addressed through on-site-and/or watershed-based BMPs:

   a. The pollutants in post-development runoff shall be reduced using controls that utilize best available technology (BAT) and best conventional technology (BCT).

   b. The discharge of any listed Pollutant to an Impaired Waterbody on the 303(d) list or adopted TMDL waterbody shall not cause or contribute to an exceedance of Receiving Water Quality Objectives.

   c. To reduce Pollutants in Urban Runoff, address hydromodification, and manage Urban Runoff as a resource to the MEP, WQMPs shall specify preferential use of site design BMPs that incorporate LID techniques in the following manner (from highest to the lowest priority): (1) Preventative measures (these are mostly non-structural measures, e.g., preservation of natural features to a level consistent with the MEP standard; minimization of Urban Runoff through clustering, reducing impervious areas, etc.); and (2) Mitigative measures (these are structural measures, such as, infiltration, harvesting and reuse, bio-treatment, etc.). The

mitigative or structural site design BMPs shall also be prioritized (from highest to lowest priority): (1) Infiltration BMPs (examples include permeable pavement with infiltration beds, dry wells, infiltration trenches, surface and sub-surface infiltration basins and bioretention and bio-treatment BMPs that maximize infiltration). (2) BMPs that harvest and re-use (e.g., cisterns and rain barrels); and (3) Vegetated BMPs that do not infiltrate but promote evapotranspiration including bioretention, biofiltration and bio-treatment. Upon the Permittees' determination of LID infeasibility, water quality volume specified in item 4, below, that is not addressed by onsite or offsite LID site design BMPs as listed above shall be treated using structural treatment control BMPs that infiltrate, filter or treat the runoff.

4. Structural treatment control systems shall be in accordance with the approved WQMP and must be sized to comply with one of the following numeric sizing criteria:

   a. VOLUME - Volume–based BMPs shall be designed to infiltrate, filter, or treat either:

      i. The volume of runoff produced from a 24-hour, 85th percentile storm event, as determined from the County of Riverside's 85th Percentile Precipitation Isopluvial Map; or,

      ii. The volume of annual runoff produced by the 85th percentile, 24-hour rainfall event determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87 (1998); or,

      iii. The volume of annual runoff based on unit basin storage volume, to achieve 80 or more volume treatment by the method recommended in California Storm water Best Management Practices Handbook – Industrial/Commercial (1993); or,

      iv. The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile, 24-hour runoff event;

      OR

   b. FLOW - Flow-based BMPs shall be designed to infiltrate, filter, or treat either:

      i. The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour; or,

      ii. The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two; or,

      iii. The maximum flow rate of runoff, as determined from the local historical rainfall record that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two.

5. New Development treatment control BMP requirements are met if, for a common plan of development, BMPs are constructed with the requisite capacity to serve the entire common project, even if certain phases of the common project may not have BMP capacity located on that phase in accordance with the requirements specified above. All structural treatment control BMPs should be located as close as possible to the Pollutant sources, should not be located within Waters of the U.S., and Pollutant removal should be accomplished prior to discharge to Waters of the U.S. Regional treatment control BMPs shall be completed and operational prior to occupation of any of the priority project sites tributary to the regional treatment control BMP.
6. Within 24 months of adoption of this Order, the Principal Permittee shall develop a procedure for streamlining regulatory agency approval of regional treatment control BMPs. The recommendations should include information needed to be submitted to Regional Board for consideration of regional treatment control BMPs. At a minimum, it should include: BMP location; type and effectiveness in removing pollutants of concern; projects tributary to the regional treatment system; engineering design details; funding sources for construction, operation and maintenance; and parties responsible for monitoring effectiveness, operation and maintenance.
7. The Permittees shall review and revise, as necessary, Sections 5, 6 and 7 of the DAMP and/or the WQMP in order to develop and implement new or enhanced BMPs that reduce pollutants in Urban Runoff from commercial and industrial sites both during and after site construction. Appropriate BMPs shall be required for industrial/commercial land uses that are identified during the land use approval process. For industrial/commercial land uses that are identified subsequent to the issuance of a discretionary map or permit approval, appropriate BMPs shall be addressed through Section 6 of the DAMP. At a minimum, the WQMP or specific plan for the commercial/industrial land use sites shall address:

    a. The identification of those characteristics of the development of a commercial or industrial site that are likely to be a source of Pollutants in Urban Runoff that should be addressed during the land use approval process, and
    b. The identification of regional or sub-regional Urban Runoff treatment/infiltration BMPs that would address post-construction Urban Runoff issues.

8. The Permitees shall require non-priority development projects (projects that are not required to develop project-specific WQMPs) to document, via a modified WQMP or a similar mechanism, site design, source control and any other BMPs which may or may not include structural treatment control BMPs.
9. Groundwater Protection:

To protect groundwater resources any structural infiltration BMPs shall meet the following minimum requirements:

a. Use of structural infiltration treatment BMPs shall not cause or contribute to an exceedance of groundwater Water Quality Objectives.
b. Source control and pollution prevention control BMPs shall be implemented to protect groundwater quality. The need for sedimentation or filtration should be evaluated prior to infiltration.
c. Adequate pretreatment of runoff prior to infiltration shall be required in gas stations and large commercial parking lots.
d. Structural infiltration treatment BMPs shall not be used in industrial areas that have exposure of equipment process and materials and/ or high vehicular traffic areas (25,000 or greater average daily traffic) .
e. Structural infiltration treatment BMPs shall not be used in automotive repair shops, car washes, nurseries or any other high threat to water quality land uses or activities.
f. Infiltration systems must be located at least 100 feet horizontally from any water supply well.
g. The vertical distance from the bottom of any infiltration structural treatment BMP to the historic high groundwater mark shall be at least 10 feet. Where the groundwater basins do not support beneficial uses, this vertical distance criteria may be reduced, provided groundwater quality is maintained.
h. Structural infiltration treatment BMPs shall not cause a nuisance or pollution as defined in Water Code Section 13050.

E. LOW IMPACT DEVELOPMENT (LID) AND HYDROMODIFICATION MANAGEMENT TO MINIMIZE IMPACTS FROM NEW DEVELOPMENT/SIGNIFICANT REDEVELOPMENT PROJECTS:

1. Within 12 months of adoption of this Order, the Principal Permittee shall update the WQMP to incorporate LID principles, including hydrologic conditions of concern. A copy of the updated WQMP shall be submitted to the Executive Officer for approval. Within six months of approval, each Permittee shall implement the updated WQMP. The objective of LID is to mimic pre-development site hydrology through technically and economically feasible source control and site design techniques. LID combines hydrologically functional site design with pollution prevention methods to compensate for land development impact on hydrology and water quality.

2. The Permittees, either through the updated WQMP or otherwise, shall require the project proponents for all priority development projects to implement LID techniques in accordance with the provisions of this section, Section XI.E. It is recognized that LID principles are not universally applicable and they are dependent on factors such as: soil conditions including soil compaction and permeability, groundwater levels, soil contaminants (brown field development),

space restrictions (in-fill projects, redevelopment projects, high density development, transit-oriented developments), highest and best use of storm water (to support downstream uses), etc. The provisions below provide for in-lieu programs and alternatives where LID techniques are not feasible.

3. The Permittees shall require those projects identified in D.3. to infiltrate, harvest and re-use, evapotranspire and/or bio-treat the 85th percentile storm event ("design capture volume"). The design capture volume should be calculated as specified in Section XII.D.5.a.1, above. Any portion of this volume that is not infiltrated, harvested and re-used, evapotranspired, and/or bio-treated shall be treated and discharged using LID BMPs shall be (?) mitigated as set forth in Section XII.F, below.

4. Within one year of adoption of this Order, each Permittee shall identify barriers for implementation of LID and should consider revising ordinances, codes, building and landscape design standards to promote green infrastructure/LID techniques including, but not limited to, the following:

   a. Landscaping designs that promote longer water retention and evapotranspiration such as 1 foot depth of compost/top soil in commercial and residential areas on top of 1 foot of non-compacted subsoil, concave landscape grading to allow runoff from impervious surfaces, and water conservation by selection of water efficient native plants, weather-based irrigation controllers, etc.

   b. Allow permeable surface designs in low traffic roads and parking lots. This may require land use/building code amendment.

   c. Allow natural drainage systems for street construction and catchments (with no drainage pipes) and allow vegetated ditches and swales where feasible.

   d. Require landscape in parking lots to provide treatment, retention or infiltration.

   e. Reduce curb requirements where adequate drainage, conveyance, treatment and storage are available.

   f. Amend land use/building codes to allow no curbs, curb cuts and/or stop blocks in parking areas and residential streets with low traffic.

   g. Use of green roof, rain garden, and other green infrastructure in urban/suburban area.

   h. Allow rainwater harvesting and reuse.

   i. Narrow streets, provide alternatives to minimum parking requirements, etc. to facilitate LID where acceptable to public safety departments.

j. Consider vegetated landscape for storm water treatment as an integral element of streets, parking lots, playground and buildings.

k. Other site design BMPs identified in the WQMP not included above.

5.Each Permittee shall update its landscape ordinance consistent with the requirements of AB 1881. The bill requires the local agencies to adopt the State Model Water Efficient Landscape Ordinance[47] or prepare one that is "at least as effective" as the State Model by January 2010. The proposed state model ordinance applies to landscape requiring a building or landscape permit, plan check or design review. The Permittees shall annually evaluate and report the effectiveness of their landscape ordinance with respect to water efficiency and conservation goals.

6. Each Permittee shall implement effective education programs to educate property owners to use pollution prevention measures and to maintain on-site hydrologically functional landscape controls.

7. To reduce pollutants in urban runoff, address hydromodification, and manage storm water as a resource to the maximum extent practicable, WQMPs shall specify preferential use of site design BMPs that incorporate LID techniques in the following manner (from highest to the lowest priority): (1) Preventative measures (these are mostly non-structural measures, e.g., preservation of natural features to a level consistent with the maximum extent practicable standard; minimization of runoff through clustering, reducing impervious areas, etc.) and (2) Mitigative measures (these are structural measures, such as, infiltration, harvesting and reuse, bio-treatment, etc.). The mitigative or structural site design BMPs shall also be prioritized (from highest to lowest priority): (1) Infiltration BMPs (examples include permeable pavement with infiltration beds, dry wells, infiltration trenches, surface and sub-surface infiltration basins. All infiltration activities should be coordinated with the groundwater management agencies, such as the Inland Empire Utilities Agency, Water Districts, etc.; (2) BMPs that harvest and re-use (e.g., cisterns and rain barrels); and (3) Vegetated BMPs that promote evapotranspiration including bioretention, biofiltration and bio-treatment.

8. The Permittees shall reflect in the Water Quality Management Plan Guidance and Template and require each priority development project to infiltrate, harvest and re-use, evapotranspire, or bio-treat[48] the 85th percentile storm event (“design

[47] http://www.owue.water.ca.gov/docs/final_reg_text.pdf
[48] A properly engineered and maintained bio-treatment system may be considered only if infiltration, harvesting and reuse and evapotranspiration cannot be feasibly implemented at a project site (feasibility criteria will be established in the WQMP [Section XI.E.6] and the technically-based feasibility criteria [Section XI.E.6.a.vi]). Specific design, operation and maintenance criteria for bio-treatment systems shall be part of the model WQMP that will be produced by the permittees.
.

capture volume"), as specified in Section XI.D.5.I.1, above. Any portion of the design capture volume that is not infiltrated, harvested and re-used, evapotranspired or bio-treated[49] onsite by LID BMPs shall be treated and discharged in accordance with the requirements set forth in Section XI.E.8 and/or Section XI.F, below.

10. Within twelve months of adoption of this Order, the Permittees shall review and update the Water Quality Management Plan Guidance and Template to incorporate LID principles and to address the impact of urbanization on downstream hydrology. At a minimum, the following elements shall be included during the update:

a. *Site Design BMPs*:

i. Review and update the menu of site design BMPs to include any LID BMP that is currently not listed.

ii. Include as a reference for design and installation of LID BMPs the *LID Guidance Manual for Southern California* developed by the Southern California Coastal Water Research Project upon its completion.

iii. Techniques or specifications to minimize soil compaction in areas designated for site design BMPs, especially infiltration.

iv. Review and update design, installation and test specifications for retention BMPs to prevent unwanted ponding.

v. Develop and utilize a credit system[50] for using site design BMPs.

vi. Within 12 months of adoption of this Order the Principal Permittee shall establish technically-based feasibility criteria for project evaluation to determine the feasibility of implementing LID. Collaboration with Orange County and San Bernardino County Permittees is encouraged in the development of these criteria.

vii. Develop in lieu programs for projects seeking a waiver of LID BMPs.

b. *Source Control BMPs*:

i. Review and update the menu of source control BMPs.

ii. Include design and installation standards for each structural source control BMP.

c. *Treatment Control BMPs*:

[49]For all references to bio-treat/bio-treatment, see footnote 85.
[50] See sample credit calculation in the draft statewide construction permit. http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/draft/draftconst_att_f.xls

i. Update the list of treatment control BMPs, including an evaluation of their effectiveness based on national, statewide or regional studies.

ii. Prioritize treatment control BMPs based on their effectiveness in pollutant removal and require project proponents to select the most appropriate BMPs.

iii. Include design and installation standards for each treatment control BMP.

d. Hydrologic Condition of Concern (HCOC):

i. The Permittees shall continue to ensure through their review and approval of project-specific WQMPs that priority development projects do not pose a hydrologic condition of concern.

ii. A development/redevelopment project does not cause a hydrologic condition of concern if it causes no adverse downstream impacts on the physical structure, aquatic and riparian habitats and any one of the following conditions is met:

1) The project disturbs less than one acre and is not part of a common plan of development.
2) The post-development site hydrology (volume and velocity) is not significantly different from pre-development hydrology for a 2- and 10-year return frequency storms (a difference of 5% or less is considered insignificant) for flow rates greater than 10% of the 2 year event. This may be achieved through site design and structural treatment control BMPs.

3) If the project site infiltrates, harvests and re-uses or evapotranspires at least the design capture volume.

4) All downstream conveyance channels to an adequate sump (e.g. Prado Dam, Lake Elsinore, Canyon Lake, Santa Ana River or other lake, reservoir or natural resistant feature) that will receive runoff from the project are engineered, hardened and regularly maintained to ensure design flow capacity, and no sensitive stream habitat areas will be affected. This exemption is only applicable to conveyance channels that have been fully and properly approved (including CEQA review, and permitted by U.S. Army Corps of Engineers, Regional Board, and California Department of Fish and Game) by September 1, 2004.

5) If there is no discharge from the project site to receiving waters under the 2-year and 10-year, 24-hour peak flow rates and 100-year storm event (Appendix O of the DAMP).

iii) If a hydrologic condition of concern exists, the WQMP shall include one of the following:

1) Evaluation of the project's potential to cause a HCOC including the project's impact on downstream erosion, sedimentation and/or stream habitat. If the evaluation confirms the project's potential to cause HCOC, then, the project shall mitigate the impact by implementing item a, b, c or d, below.

   a) Require additional onsite or offsite mitigation to address potential erosion or habitat impact using LID BMPs.

   b) Require in-stream controls[51] to mitigate the impacts. The project proponent should first consider site design controls and on-site controls prior to proposing in-stream controls; in-stream controls must not adversely impact Beneficial Uses or result in sustained degradation of water quality of the Receiving Waters and shall require all necessary regulatory approvals[52].

   c) Mitigate the HCOC impact by requiring the project to have no more than 3% effective impervious area.

   d) Mitigate the HCOC through implementation of the approved Watershed Action Plan component of the DAMP.

2) If site conditions do not permit items a, b, c, or d, above, the alternatives and in-lieu programs discussed under Section F, below, may be considered.

F. ALTERNATIVES AND IN-LIEU PROGRAMS

1. If a particular BMP is not technically feasible, other BMPs should be implemented to achieve the same level of compliance, or if the cost of BMP implementation greatly outweighs the pollution control benefits, the permittees may grant a waiver of the BMPs. All waivers, along with waiver justification documentation, must be submitted to the Executive Officer in writing within 30 days.

[51] In-stream measures involve modifying the receiving stream channel slope and geometry so that the stream can convey the new flow regime without increasing the potential for erosion and aggradation. In-stream measures are intended to improve long-term channel stability and prevent erosion by reducing the erosive forces imposed on the channel boundary.

[52] In-stream control projects require a Stream Alteration Agreement from the California Department of Fish &
Game, a CWA section 404 permit from the U.S. Army Corps of Engineers, and a section 401 certification from the Water Board. Early discussions with these agencies on the acceptability of an in-stream modification are necessary to avoid project delays or redesign.

2. Within 12 months of adoption of this Order, the Principal Permittee, in collaboration with the TAC and the Co-Permittees, shall develop technically-based feasibility criteria for project evaluation to determine the feasibility of implementing LID BMPs. These criteria shall be submitted to the Executive Officer for approval. Only those projects that have completed a feasibility analysis as per the approved criteria should be considered for alternatives and in-lieu programs.

3. The Permittees may collectively or individually propose to establish an Urban Runoff fund to be used for urban water quality improvement projects within the same watershed that is funded by contributions from developers granted waivers. The contributions should be at least equivalent to the cost savings for waived projects. If a waiver is granted and an urban runoff fund is established, the annual report for the year should include the following information with respect to the urban runoff fund:

   a. Total amount deposited into the funds and the party responsible for managing the urban runoff fund;

   b. Projects funded or proposed to be funded with monies from the Urban Runoff fund;

   c. Party or parties responsible for design, construction, operation and maintenance of Urban Runoff funded projects; and

   d. Current status and a schedule for project completion.

4. The obligation to install structural treatment control BMPs at a new development is met if, for a common plan of development, BMPs are constructed with the requisite capacity to serve the entire common project, even if certain phases of the common project may not have BMP capacity located on that phase in accordance with the requirements specified above. The goal of the WQMP is to develop and implement practicable programs and policies to minimize the effects of urbanization on site hydrology, urban runoff flow rates, velocities, duration and time of concentration and pollutant loads. This goal may be achieved through watershed-based structural treatment controls, in combination with site-specific BMPs. All treatment control BMPs should be located as close as possible to the pollutant sources, should not be located within waters of the US, and pollutant removal should be accomplished prior to discharge to Waters of the US. Regional treatment control BMPs shall be operational prior to occupation of any of the priority project sites tributary to the regional treatment BMP.

5. The Permittees may establish a water quality credit system for alternatives to evapotranspiration, infiltration, LID and hydromodification requirements specified above. A summary of any waivers of LID and hydromodification requirements should be included in the annual report for each year. The following types of projects may be included in this credit system:

   a. Redevelopment projects that reduces the overall impervious area

b. Brownfield redevelopment
c. High density developments (>7 units per acre)
d. Mixed use and transit-oriented development (within ½ mile of transit)
e. Dedication of undeveloped portions of the project site to parks, preservation areas and other pervious uses
f. Regional treatment systems with a capacity to treat flows from all upstream developments
g. Contribution to an urban runoff fund (see F.2, above)
h. Offsite mitigation or dedicated mitigation areas within the same watershed
i. Highly urbanized areas such as city center area
j. Historic Districts and Historic Preservation areas
k. Live-work developments
l. In-fill projects

G. APPROVAL OF WQMP

Within twelve months of adoption of this Order, each Permittee shall develop and implement standard procedures and tools and include in its LIP the following:

1. The Permittees shall utilize a mechanism for review and approval of WQMPs, including a checklist that incorporates the minimum requirements of the model WQMP. The project for review and approval shall be described in the Permittees LIP.
2. Continue to ensure that the entities responsible for BMP maintenance and the mechanism for BMP funding is identified prior to WQMP approval.
3. A WQMP review checklist that incorporates the required elements of the WQMP together with a clear chain of approval. This review process shall involve city or county planners during the preliminary and final WQMP review to ensure incorporation of project-specific water quality measures and watershed protection principles in the CEQA analysis.
4. Tools or procedures to incorporate in project conditions of approval proper maintenance and operation of all structural treatment control BMPs. The parties responsible for the long-term maintenance and operation of the facilities upon project close-out and a funding mechanism for operation and maintenance shall be identified prior to approval of the WQMP.
5. A mechanism to ensure that appropriate easements and ownerships are properly recorded in public records at the County and/or the city that provides access for operation and maintenance of post-construction BMPs. (See I.1 below)
6. A final project close-out procedure and checklist to ensure that post-construction BMPS (site design, structural source control and treatment control BMPs have been built as intended and are fully functional prior to issuance of certificates of occupancy (COO). (See H.1 and 2 below)
7. The Permittees shall train those involved with WQMP reviews in accordance with Section XIV, Training Requirements.

H. FIELD VERIFICATION OF BMPS

1. The Permittees' permit close-out procedures shall include field verification that structural site design, source control and Treatment Control BMPs are designed, constructed and functional in accordance with the approved WQMP.
2. Prior to occupancy, the Permittees shall verify through visual observation that the BMPs are working and functional.

3. The Permittees may accept self-certification or third-party certification of BMPs from State-licensed professional engineers.

I. CHANGE OF OWNERSHIP AND RECORDATION

The Permittees shall establish a mechanism to ensure that appropriate easements and ownerships are properly recorded in public records at the County and/or the city and the information is conveyed to all appropriate parties when there is a change in project or site ownership.

J. OPERATION AND MAINTENANCE OF POST-CONSTRUCTION BMPS

1. The Permittees shall ensure that structural treatment control BMPs are designed and implemented with control measures necessary to effectively minimize the creation of nuisance or pollution associated with vectors, such as mosquitoes, rodents, flies, etc. Each Permittee should work with the local vector agency to ensure that structural treatment control systems are designed to minimize the potential for vector breeding. If vector or nuisance problems are identified during inspections, the site should be referred to the local vector control agency. Each Permittee should work with the vector agency to remedy the problems associated with vectors.
2. The Permittees shall, through conditions of approval and as built inspections ensure proper maintenance and operation of any permanent MS4 facilities and structural post-construction treatment systems prior to issuance of certificates of occupancy. The parties responsible for the maintenance and operation of the facilities, and a funding mechanism for operation and maintenance shall be identified prior to issuance of occupancy permits. Design of these structures shall allow adequate access for maintenance.
3. Each Permitee shall maintain a database to track the operation and maintenance of the structural treatment control BMPs installed after adoption of this Order. The database shall include type of BMP, watershed where it is located design, location of BMPs (latitude and longitude), date of construction, party responsible for maintenance, maintenance frequency, source of funding for operation and maintenance, maintenance verification, and any problems identified during inspection including any vector or nuisance problems.

4. Within 12 months of adoption of this order and annually thereafter, all public agency structural treatment control BMPs, and at least 25% of priority development project structural treatment control BMPs, shall be inspected prior to the rainy season. All structural treatment control BMPs shall be inspected within every four year period. The Permittees shall ensure that the BMPs are operating and are

maintained properly and all control measures are working effectively to remove pollutants in runoff from the site. All inspections shall be documented and kept as Permittee record. The Permittees may accept inspection reports conducted and certified by state licensed professional engineers in lieu of Permittee inspections.

5. The Annual Report shall include a list of all post-construction BMPs approved, constructed and/or operating within each Permittee's jurisdiction.

K. PRE-APPROVED PROJECTS

The above provisions for LID and hydrologic conditions of concern are not applicable to projects that have an approved Water Quality Management Plan as of the date of approval of the revised WQMP. The above provisions shall be implemented in a manner consistent with the MEP standard for all other projects 45 days from the date of approval of the revised WQMP. The Regional Board recognizes that full implementation may not be feasible for certain projects which have received tentative tract or parcel map or other discretionary approvals.

XIII. PUBLIC EDUCATION AND OUTREACH

A. The Permittees shall continue to implement the public education efforts already underway and shall continue to promote the most effective elements of the comprehensive public and business education strategy contained in the Report of Waste Discharge and Section 10 of the DAMP. As part of the Annual Report, the Permittees shall review their public education and outreach efforts and revise their activities to adapt to the needs identified in the annual reassessment of program priorities with particular emphasis on addressing the Pollutants of Concern. Results of this review shall direct the focus of its public education effort and cause recommendations for any changes to the public and business education program including: (1) how to make the multimedia efforts more effective; (2) a reevaluation of audiences and key messages for targeted behaviors; and (3) opportunities for participation in regional and statewide public education efforts. The goal of the public and business education program shall be to target 100% of the residents, including businesses, commercial and industrial establishments.

B. A status report on the requirements of this section and any changes to the on-going public education program shall be described in the annual report.

C. The Permittees shall implement an assessment program to measurably increase public knowledge of its communities regarding MS4s and impacts of Urban Runoff on receiving waters. The Permittees shall implement programs that can measure the change in behavior of its target communities to reduce pollutant releases to the MS4s

and the environment. A description of the program tasks, schedule and measurable goals shall be included in the first annual report due after adoption of this Order.

D. When feasible, the Permittees shall participate in joint outreach programs with other agencies including, but not limited to, the Storm Water Quality Standards Task Force, Caltrans, and other county and municipal storm water programs to ensure that a consistent message on storm water pollution prevention is disseminated to the public.

E. The Permittees shall ensure implementation of BMPs listed in the DAMP, the LIP and/or the Water Quality Management Plan for restaurants, automotive service centers, gasoline stations and other similar facilities by distributing BMP brochures or other fact sheets to those facilities during inspections and/or through other means. Adequacy of BMP implementation during inspections subsequent to distribution of BMP fact sheets shall be one measure of the effectiveness of public outreach efforts.

F. Within 12 months from the date of adoption of this Order, the Permittees shall ensure that they have developed, maintained and distributed BMP guidance for the control of those potentially polluting activities identified during the third term permit, which are not otherwise regulated by any agency, including guidelines for the household use of fertilizers, pesticides, herbicides and other chemicals, and guidance for mobile vehicle maintenance, carpet cleaners, commercial landscape maintenance, and pavement cutting. These guidance documents shall be distributed to the public, trade associations, etc., through participation in community events, trade association meetings and/or by mail.

G. The Permittees shall develop and distribute BMP fact sheets for commercial and industrial facilities that use, handle, process, transport, or manufacture plastic.

H. The Permittees shall ensure that appropriate educational materials, including the BMP brochures, are provided to all new industrial and commercial enterprises within their jurisdiction at the time building and construction permits (or occupancy permits) are issued and/or at the time business licenses are issued.

I. The Permittees shall further develop and maintain public education materials to encourage the public to report illegal dumping and unauthorized, non-storm water discharges from residential, industrial, construction and commercial sites into public streets, storm drains and to surface waterbodies and their tributaries; clogged storm drains; faded or missing catch basin stencils and general storm water and BMP information. Each Permittee's hotline and web site information shall provide access to information regarding general Urban Runoff pollution control measures. The hotline and website information shall be included in the public and business education program and shall be listed in the governmental pages of all regional phone books and on the Permittees' website.

J. The Permittees shall maintain a Public Education Committee to provide oversight and guidance for the implementation of the public education program. The Permittees

K. The Permittees shall continue to sponsor or staff a table or booth at community, regional, and/or countywide events to distribute public education materials related to urban storm water pollution prevention to the public. Each Permittee shall participate in at least one event per year.

L. Successful implementation of the provisions and limitations in this Order will require the cooperation of all the public agency organizations within Riverside County having programs/activities that have an impact on Urban Runoff quality. This may include, but not be limited to, those listed in Appendix 2. As such, the Permittees should coordinate their efforts with those organizations to ensure participation in implementing the requirements of this Order. The Permittees should notify the Regional Board of any non-cooperating entities. The Permittees shall be responsible for involving the public agency organizations in their urban storm water management programs.

M. Within 12 months of adoption of this Order, each Permittee shall distribute BMP Fact Sheets for mobile businesses that have been developed by the Permittees. At a minimum, the mobile business Fact Sheets/training program should include: laws and regulations dealing with Urban Runoff and discharges to storm drains; appropriate BMPs and proper procedures for disposing of wastes generated from each mobile business.

XIV. PERMITTEE FACILITIES AND ACTIVITIES

A. Each Permittee shall continue to implement measures to ensure that their facilities and activities do not cause or contribute to a pollution or nuisance in receiving waters, as defined in Section 13050 of the Water Code. During the Second Term Permit, Permittees developed a Municipal Facilities Strategy to identify types of municipal facilities they operate which have potential to contribute pollutants to Urban Runoff, which was incorporate into Section 5 of the DAMP. By July 1 of each year, the Permittees must review their activities and facilities to determine the need for revisions to Section 5 of the DAMP and to their LIP. The Annual Report shall include the findings of this review and a schedule for any needed revisions. The Permittees should continue to use Facility Pollution Prevention Plans as noted in Chapter 5 of the DAMP to ensure that the Permittee facilities are not sources of Pollutants to the Waters of the U.S.

B. Within 12 months of adoption of this Order, each Permittee shall review its inventory of fixed facilities listed in the DAMP, its field operations and drainage facilities to ensure that public agency facilities and activities are addressed by Facility Pollution Prevention Plans

consistent with Chapter 5 of the DAMP and do not cause or contribute to a pollution or nuisance in receiving waters. Existing Facility Pollution Prevention Plans shall be reviewed to insure proper BMPs for these facilities. For Permittee facilities and/or activities tributary to CWA Section 303(d) impaired water bodies that generate Pollutants for which the water body is impaired, additional Pollutant-specific BMPs to target that Pollutant shall be identified and implemented in the Facility Pollution Prevention Plan.

C. Each Permittee shall conduct inspections of its fixed facilities and field operations identified in Chapter 5 of the DAMP annually to ensure that they do not contribute Pollutants to Receiving Waters. The Permittees shall record the findings in the inspection forms developed by the Permittees.

D. Each Permittee shall implement BMPs to manage the application, storage, and disposal of pesticides, herbicides, and fertilizers associated with their municipal facilities and activities. At a minimum, the Facility Pollution Prevention Plans for these facilities and activities shall:

1. Ensure that municipal applicators and distributors have appropriate training, permits, and certifications;
2. Utilize integrated pest management measures that rely on non-chemical solutions, to the extent practicable;
3. Promote the use of native vegetation into facility landscaping;
4. Include schedules for irrigation and chemical application; and
5. Collect and properly dispose of unused pesticides, herbicides, and fertilizers.
6. The following BMPs are identified as minimum BMPs in the fact sheets developed by the Permittees:
   i. SC-35/SC-61, Safer Alternative Products
   ii. SC-41, Building & Grounds Maintenance
   iii. SC-60, Housekeeping Practices
   iv. SC-73, Landscape Maintenance

E. Each Permittee shall review, update, and implement the individual clean out schedules and frequency for its MS4 facilities during the wet and dry season to protect receiving water quality consistent with the MEP standard. The inspection and cleaning frequency for all portions of the MS4s shall be included in each Permittee's LIP and shall be evaluated annually to determine the need for increasing the inspection and cleaning frequency. Each Permittee must clean those MS4 facilities where there is evidence of illegal discharge. In addition, each Permittee must clean those retention/detention basins and conveyance systems where the inspection reveals that the storage volume is about 25% full or if accumulated sediment or debris impairs the hydraulic capacity of the facility.

F. Unless otherwise supported by field information, each Permittee shall at a minimum inspect, clean, and maintain at least 80% of its open channels, catch basins,

retention/detention basins, and wetlands created for Urban Runoff treatment on an annual basis, with 100% of the facilities in a two year period. The MS4 clean out schedule shall be included in the Annual Report.

G. The Principal Permittee shall continue to develop and distribute BMP guidance for public agency and contract field operations and maintenance staff to provide guidance in appropriate pollution prevention measures, how to respond to spills and reports of illegal discharges, etc.

H. The Permittees shall maintain an updated site-specific Urban Runoff Pollution Prevention Plan for their facilities and activities that have a potential to contribute to pollution or nuisance in receiving waters.

I. The Permittees shall ensure that their flood management processes and projects do not contribute Pollutants to Receiving Waters.

J. Each Permittee shall examine opportunities to retrofit existing MS4 facilities with water quality protection measures, where feasible.

K. PERMITTEE COMPLIANCE WITH GENERAL PERMITS

1. GENERAL CONSTRUCTION PERMIT

a. All Permittee construction activities shall be in compliance with the latest version of the General Construction Permit.

b. This Order authorizes the discharge of storm water runoff from construction projects that may result in land disturbance consistent with the acreage criteria of the latest version of the General Construction Permit.

c. Prior to commencement of construction activities, the Permittees shall notify the Executive Officer of the proposed construction project by submitting a NOI, or Permit Registration Documents (PRDs) as provided in Attachment 5, and a location map depicting the project location. The filing fees for these NOIs/PRDs are waived for the Permittees.

d. Upon completion of the construction project, the Executive Officer shall be notified of the completion of the project by submitting: (1) a Notice of Termination (NOT), provided in Attachment 5; (2) photographs of the completed project; (3) a location map depicting the project location and structural post-construction BMPs installed for projects meeting the WQMP criteria in Section XI.D. of this Order (latitude and longitude) if appropriate; and (4) field verification report and long term operation and maintenance responsibility for applicable post-construction BMPs. A database of structural post-construction BMPs for which the Permittees are responsible

shall be developed and used as a compliance measure to determine compliance with this Order.

e. The Permittees shall develop and implement a WQMP consistent with Section XII.D. of this Order, a SWPPP and a monitoring and reporting program that is specific for the construction project prior to the commencement of construction activities.

f. The SWPPP and the monitoring and reporting program for the construction projects must be consistent with the requirements of the latest version of the General Construction Permit. The Permittee must review and approve the WQMP and the SWPPP prepared by their contractors.

g. The Permittees shall give advance notice to the Executive Officer of planned changes in the construction activity, which may result in non-compliance with the latest version of the General Construction Permit.

h. Emergency Permittee projects required to protect public health and safety are exempted from compliance with the requirements of this subsection until the emergency ends, at which time they need to comply with the requirements of this section.

2. GENERAL DE-MINIMUS PERMIT DISCHARGES

a. The Permittees are authorized to discharge de-minimus types of discharges listed under Regional Board's Order No. R8-2009-0003. The de-minimus discharges from Permittee owned and/or operated facilities and/or activities shall be in compliance Order No. R8-2009-0003 except that the Permittees need not file a NOI under the de-minimus permit and need not pay the filing fee. However, the Permittees shall notify the Executive Officer of each proposed discharge at least 15 days prior to start of the discharge.

b. The Permittees shall comply with the monitoring and reporting requirements of Order No. R8-2009-0003. The Permittees may amend Section 5 of the DAMP to specify minimum BMPs for De-minimus discharges.

c. Compliance determination shall be based on the following: If a daily discharge or when the median for multiple sample data of a daily discharge exceeds the maximum daily concentration limit for a given parameter, the Permittee will be considered out of compliance for that parameter for that day only within the reporting period.

d. Constituents with concentration limitations shall be monitored at least once per year.

e. Reductions in monitoring frequency can be considered by the Executive Officer under the following conditions:

   i. For a specific constituent, reduction of weekly monitoring to bi-monthly (every two weeks) monitoring can be considered for approval by the Executive Officer when the effluent monitoring data for the last 3 months shows compliance with the effluent limitations.

   ii. For a specific constituent, reduction of bi-monthly (every two weeks) monitoring to monthly monitoring can be considered for approval by the Executive Officer when the effluent monitoring data for the last 6 months shows compliance with the effluent limitations.

   iii. For a specific constituent, reduction of monthly monitoring to quarterly monitoring can be considered for approval by the Executive Officer when the effluent monitoring data for the last 12 months show compliance with the effluent limitations.

f. In the event the Permittee does not comply or will be unable to comply for any reason, with any prohibition, discharge limitation (e.g., maximum daily concentration limit), or receiving water limitation specified in Order No. R8-2009-0003, the Permittee shall notify the Executive Officer by telephone (951) 782-4130 within 24 hours of having knowledge of such noncompliance that may endanger public health or the environment, and shall confirm this notification in writing within five days, unless the Executive Officer waives the written notification. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation.

g. Monitoring reports shall be submitted with the annual report and shall include:

   i. The results of all chemical analyses,

   ii. The daily flow data,

   iii. A summary of the monthly activities including a report detailing compliance or noncompliance, and

   iv. Where the requirements are not met, the monitoring report shall include a statement discussing the reasons for noncompliance, and of the actions undertaken or proposed which will bring the Permittee into full compliance with requirements at the earliest time, and an estimate of the date when the Permittee will be in compliance. The Permittee shall notify the Executive Officer by letter when compliance with the time schedule has been achieved.

h. The Permittees discharging 150,000 gallons per day or more shall submit semi-annual reports. Where the discharge lasts less than 6 months, a report covering the period of the discharge shall be submitted.

XVI. TRAINING PROGRAM FOR STORM WATER MANAGERS, PLANNERS, INSPECTORS AND MUNICIPAL CONTRACTORS

A. Within 12 months of adoption of this Order, each Permittee shall update its LIP to include a program to provide formal and informal training to Permittee staff and contractors that implement the provisions of this Order. The training program shall include a schedule and curriculum content that address required expertise and competencies for Permittee storm water managers and the following Permittee staff insomuch as they are involved in the implementation of the provisions of this Order:, inspectors, maintenance crews, those involved in the review and approval of WQMPs, public works employees, planning staff, and for Permittee contractors.

1. Each Permittee shall maintain a written and/or electronic record of stormwater training provided to its storm water and related program staff.
2. The curriculum content shall address:

a. Applicable water quality laws and regulations as they apply to construction and grading activities, industrial and commercial activities;

3. potential effects of construction, industrial and commercial activities and urbanization on water quality;
4. implementation and maintenance of erosion and sediment control BMPs and pollution prevention measures;
5. proper use and maintenance of erosion and sediment controls; erosion and sediment control ordinances; the provisions of the General Construction Permit, the General Industrial Permit, General De-Minimus Permit and any other permit issued within the Permitted area by the State or Regional Board that is appropriate due to the relationship of the permit provisions to the duties of the target audience;
6. enforcement protocols and methods established in the DAMP, the Municipal Facilities Strategy and Enforcement Compliance Strategy, and ID/IC Elimination Program.
7. Local Implementation Plan, Water Quality Management Plan, including Low Impact Development Principles and Hydrologic Conditions of Concern as they apply to the MS4 permit.,

B. The training programs should be coordinated with the County Vector Control District to ensure that vector control issues related to post-construction BMPs are incorporated into the training curriculum.

C. The training programs for each category of trainees (storm water program managers, construction/industrial/ commercial, inspectors, planners, engineers, Permittee contractors, public works crew, etc.) shall define the required knowledge and competencies, outline the curriculum, a testing or other procedure at the end of the training program to determine that the trainees have acquired the requisite knowledge to carry out their duties, and proof of completion of training such as Certificate of Completion, attendance sheets. and shall include:

1. The requirements of Storm Water Ordinances, resolutions, codes, and standards that relate to the duties of the target audience;
2. The provisions of this Order that relate to the duties of the target audience;
3. Implementation and assessment of appropriate pollution prevention plans relative to the duties of the target audience;
4. Selection, implementation and maintenance of appropriate BMPs relative to the duties of the target audience;
5. Tools, checklists, procedures to implement the requirements of this Order relative to the duties of the target audience.

D. Formal training shall be summarized and documented in the annual reports. At a minimum, the training schedule should include the following:

1. New employees responsible for implementing requirements of this Order must receive formal training within six months of hire.
2. Existing employees must receive follow-up training at least once during five years.
3. Construction and storm water inspection employees must receive refresher training focused on appropriate BMP implementation at least once a year prior to the rainy season.
4. Each Permittee shall document training provided to its staff.

E. At least every two years, the Principal Permittee shall provide and document training to applicable public agency staff on area wide procedures such as the updated Municipal Facilities Strategy (MFS) contained in the DAMP, and any other applicable guidance and procedures developed by the Permittees to address municipal activities in fixed facilities as well as field operations, including MS4 facility maintenance. The Permittee training program should include Model Integrated Pest Management, Pesticide and Fertilizer Guidelines. . The training sessions may be conducted in classrooms or using videos, DVDs, or other multimedia with appropriate documentation and a final test to verify that the material has been properly reviewed and understood. In instances where applicable municipal operations are performed by contract staff, each Permittee shall require evidence that contract staff have received a level of training equivalent to that listed above.

F. The Principal Permittee shall conduct and document public employee training for reviewing Project Specific WQMPs

G. The Permittees shall provide BMP and training information to their contractors to assist them in training their staff. In instances where applicable Permittee operations are performed by contract staff, the Permittees shall require evidence that contract staff have received a level of training equivalent to that listed above.

H. The Principal Permittee shall notify designated Regional Board staff via e-mail at least 30 days prior to conducting regional training sessions.

XVI. NOTIFICATION REQUIREMENTS

A. Within 24 hours of discovery, the Permittees shall provide oral or email notification to Regional Board staff of noncompliant sites within its jurisdiction that are determined to pose a threat to human health or the environment (an oil spill that could impact wild life, a hazardous substance spill where residents are evacuated, etc.). Following oral notification, a written report must be submitted within 10 days, detailing the nature of the non-compliance, any corrective action taken by the site/facility owner, other relevant information (e.g., past history of non-compliance, environmental damage resulting from the non-compliance, site/facility owner responsiveness) and the type of enforcement that will be carried out by the Permittee. Further, incidences of noncompliance shall be recorded along with the information noted in the written report and the final outcome/enforcement for the incident in the databases for construction, industrial and commercial inspections.

B. At a minimum, all sewage spills above 1,000 gallons and all reportable quantities of hazardous waste spills as per 40CFR 117 and 302 shall be reported within 24 hours. All spill incidents shall be also included in the annual report

C. All reports submitted by the Permittees as per the requirements in this Order for the approval of the Executive Officer shall be publicly noticed and made available on the Regional Board's website, or through other means, for public review and comments. The Executive Officer shall consider all comments received prior to approval of the reports. Any unresolved issue shall be schedule for a public hearing at a Regional Board meeting prior to approval of the Executive Officer.

D. As specified in Section XI.A.3, the Permittees shall deem facilities operating without a proper permit to be in significant non-compliance. These facilities shall be reported within 14 calendar days to Regional Board staff by electronic mail or other written means. Permittees' notifications of facilities' failure to obtain required permits under the General Construction Permit, General Industrial Permit, including requirements to

file a NOI or No Exposure Certification, Notice of Non-applicability, and/or 401 Certification must include, at a minimum, the following documentation:

1. Name of the facility
2. Operator of the facility
3. Owner of the facility
4. Construction/Commercial/industrial activity being conducted at the facility that is subject to the Construction/Commercial/industrial Permit or 401 Certification
5. Records of communication with the facility operator regarding the violation, which must include at least an inspection report.

E. The Permittees shall report to the Executive Officer:

1. Any enforcement actions and known discharges of Urban Runoff or non-storm water discharges to MS4 facilities, known to the Permittees, which may impair domestic water supply sources (e.g., discharges due to levee break, illegal discharges to the street, etc.) or which may have an impact on human health or the environment; if the discharge is to Canyon Lake or any tributary to Canyon Lake, Elsinore Valley Municipal Water District shall also be notified immediately; and
2. Any suspected or reported activities on federal, state, or other entity's land or facilities, where the Permittees do not have any jurisdiction, and where the suspected or reported activities may be contributing pollutants to waters of the U.S.

XVII. PROGRAM MANAGEMENT ASSESSMENT/DAMP REVIEW

A. By October 1 of each year, the Permittees shall evaluate the effectiveness of the Urban Runoff management program described in the DAMP to determine the need for any revisions in order to reduce pollutants in MS4 discharges consistent with the MEP standard. In addition, the first annual review after adoption of this Order shall include the following:

1. Review of the formal training needs of municipal employees
2. Review of coordination meeting/training for the designated NPDES inspectors.
3. Assessment of urban runoff management program effectiveness on an area wide as well as jurisdiction-specific basis. Permittees shall utilize the CASQA Guidance[53] for developing these assessment measures at the six outcome levels. The assessment measures must target both water quality outcomes and the results of municipal enforcement activities.

B. The annual report shall include the findings of this review and a schedule to address necessary revisions, or a copy of the amended DAMP with the proposed changes.

[53] CASQA, May 2007. Municipal Storm water Program Effectiveness Assessment Guidance.

Replacement pages are acceptable if modifications are not extensive. Annual reports shall also be submitted in electronic format.

C. Upon the effective date of this Order, the Permittees shall start implementing the 2007 DAMP consistent with the requirements of this Order. If major modifications to the 2007 DAMP not addressed in this Order are determined to be necessary, the Permittees shall prepare and submit DAMP modifications to the Executive Officer for approval. Such modifications may include regional and watershed-specific requirements and/or waste load allocations developed and approved pursuant to the TMDL process.

D. Each Permittee shall designate at least one representative to the Management Steering Committee and Technical Committee. The Principal Permittee shall be notified immediately, in writing, of changes to the designated representative to either Committee. The designated representative for each Committee shall attend that Committee's meeting as follows: at least one (1) out of two (2) Management Steering Committee meetings and eight (8) out of ten (10) Technical Committee meetings per year to discuss issues related to permit implementation and regional and statewide issues.

E. The Permittees shall continue to implement all elements of the approved DAMP. Program elements revised in compliance with the requirements of this Order must be implemented in conformance with the schedules specified in this Order following approval of the Executive Officer.

XVIII. FISCAL RESOURCES

A. Each Permittee shall secure resources necessary to Meet all requirements of this Order.. This Order may be revised to adjust time schedules to accommodate prioritization of available resources.

B. The Permittees shall prepare and submit a financial summary to the Executive Officer. The financial summary shall be submitted with the Annual Report each year and shall, at a minimum, include the following:

1. Each Permittee's expenditures for the previous fiscal year,
2. Fiscal developments that may impact availability of funding to achieve required implementation schedule.
3. Each Permittee's budget for the current fiscal year,
4. A description of the source of funds, and
5. Each Permittee's estimated budget for the next fiscal year.

XIX. MONITORING AND REPORTING PROGRAM

The Permittees must comply with Monitoring and Reporting Program No. R8-2009-0033, Appendix 3, and any revisions thereto, which are hereby made a part of this Order. The Executive Officer is hereby authorized to revise the Monitoring and Reporting Program in

a manner consistent with this Order to allow the Permittees to participate in regional, statewide, national or other monitoring and reporting programs in lieu of or in addition to Monitoring and Reporting Program No. R8-2009-0033.. In addition, dates for completion and implementation of certain program elements and reporting requirements are outlined in the Monitoring and Reporting Program.

XX. PROVISIONS

A. All reports submitted by the Permittees as per the requirements in this Order for the approval of the Executive Officer shall be publicly noticed and made available on the Regional Board's website, or through other means, for public review and comments. The Executive Officer shall consider all comments received prior to approval of the reports. Any unresolved significant issues shall be scheduled for a public hearing at a Regional Board meeting prior to approval by the Executive Officer.

B. Permittees shall demonstrate compliance with all the requirements in this Order and shall implement the DAMP and any modifications, revisions, or amendments thereto, which are developed pursuant to this Order or determined by the Permittees to be necessary to meet the requirements of this Order. The DAMP, including any approved amendments thereto is hereby made an enforceable component of this Order.

C. The Permittees shall implement all elements of the DAMP and its components. Where the dates are different from the corresponding dates in this Order, the dates in this Order shall prevail. Any proposed revisions to the DAMP shall be submitted with the annual report to the Executive Officer for review and approval. All approved revisions to the DAMP shall be implemented as per the time schedules approved by the Executive Officer. In addition to those specific controls and actions required by: (1) the terms of this Order and (2) the DAMP and its components, each Permittee shall implement additional controls, if any are necessary, to reduce the discharge of pollutants in Urban Runoff consistent with the MEP standard.

D. Certain BMPs implemented or required by the Permittees for urban storm water management may create habitat for vectors (e.g., mosquitoes and rodents) if not properly designed and maintained. Close collaboration and cooperative effort between the Permittees and local vector control agencies and the State Department of Health Services during the development and implementation of Urban Runoff management programs are necessary to minimize potential vector habitat and public health impacts resulting from vector breeding. Nothing in this permit is intended to prohibit inspection or abatement of vectors by the State or local vector control agencies in accordance with the respective Health and Safety Code.

E. Upon approval by the Executive Officer all plans, reports and subsequent amendments required by this Order shall be implemented and shall become an enforceable part of this Order. Prior to approval by the Executive Officer, these plans, reports and amendments shall not be considered as an enforceable part of this Order.

F. The permit application and special NPDES program requirements are contained in 40 CFR 122.21 (a), (b), (d)(2), (f), (p); 122.41 (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l); and 122.42 (c), and are incorporated into this Order by reference.

G. The Permittees must comply with all terms, requirements, and conditions of this Order. Any violation of this Order constitutes a violation of the CWA, its regulations and the California Water Code, and is grounds for enforcement action, Order termination, Order revocation and re-issuance, denial of an application for re-issuance, Order revisions, or a combination thereof.

H. Permittees must continue to take reasonable steps to minimize or prevent any discharge to the MS4s that has a reasonable likelihood of adversely affecting human health or the environment.

I. Regional Board staff, USEPA, and other authorized representatives must be allowed to:

1. Inspect Permittee records associated with compliance of this Order.

2. Access to and copying of records that are kept under the conditions of this Order.

3. Photograph and inspect any facilities or equipment (including monitoring and control equipment) that are related to or may impact storm water discharge or authorized Non-storm Water discharge.

4. Conduct sampling, and monitoring activities for the purpose of assuring compliance with this Order, or as otherwise authorized by the CWA and/or the Water Code.

5. Review the Permittee's programs and require modification to their programs to comply with the requirements of this Order.

6. Request copies of data, monitoring reports, and sampling data and copies of the Permittee's conclusions and evaluations of the data.

J. It must not be a defense for the Pemittees in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order.

K. Permittees must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittees to achieve compliance with the conditions of this Order.

L. This Order does not convey any property rights of any sort or any exclusive privileges.

M. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations.

N. The Permittees must give advance notice to the Executive Officer of any planned changes in the permitted facility or activity that may result in noncompliance with this Order.

O. When Permittees become aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Board, or USEPA, the Permitttees must promptly submit such facts or information.

P. All applications, reports, or information submitted to the Regional Water Board, State Board, and/or USEPA are to be signed and certified by either:

1. A principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA)

2. A duly authorized representative of the person in 1, above. A person is a duly authorized representative only if the authorization is made in writing by a person described above;

3. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

4. The written authorization is submitted to the Executive Officer.

5. If an authorization described above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to the Executive Officer prior to or together with any reports, information, or applications, to be signed by an authorized representative.

6. Any person signing a document described above must make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

XXI. PERMIT MODIFICATION

A. Following appropriate public notice, and in accordance with 40 CFR 122.41(f), this Order may be modified, revoked or reissued prior to its expiration date for the following reasons:

1. To address significant changes in conditions identified in the technical reports required by the Regional Board which were unknown at the time of the issuance of this Order;
2. To incorporate applicable requirements of statewide water quality control plans adopted by the State Water Resources Control Board or any amendments to the Basin Plan approved by the Regional Board, the State Board and, if necessary, by the Office of Administrative Law and the USEPA;
3. To comply with any applicable requirements, guidelines, or regulations issued or approved under the Clean Water Act, if the requirements, guidelines, or regulations contain different conditions or additional requirements than those included in this Order; or,
4. To incorporate new or revised program elements and compliance schedule(s) necessary to comply with this Order;
5. To incorporate any requirements imposed upon the Permittees through the TMDL process.

B. The filing of a request by the Permittees for modification, revocation and re-issuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any conditions of this Order.

C. This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittees for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition.

D. Permittees must furnish to the Regional Board, State Board, or USEPA within a reasonable time, any information which the Regional Board, State Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Permittee must also furnish to the Regional Water Board, State Board, or USEPA copies of records required to be kept by this Order.

E. Pursuant to Section 13228 of the Water Code, the Regional Board may exercise its option for allowing the portion of the City of Murrieta located within the Santa Ana Region

to be regulated by the San Diego Regional Water Quality Control Board under its Riverside County MS4 Permit.

XXII. PERMIT EXPIRATION AND RENEWAL

A. This Order expires on XXXXXX(DATE), 2014 and the Permittees must file a Report of Waste Discharge (permit renewal application) no later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements. The Report of Waste Discharge (ROWD) shall, at a minimum, include the following:

1. Any revisions to the DAMP incuding, but not limited to, all the activities the Permittees propose to undertake during the next permit term, goals and objectives of such activities, an evaluation of the need for additional source control and/or structural BMPs, any proposed pilot studies, etc.;
2. Changes in land use and/or population including map updates;
3. Any significant changes to the storm drain systems, outfalls, detention or retention basins or dams, and other controls including map updates of the storm drain systems; and
4. An assessment of the overall urban storm water management program and its effectiveness in meeting water quality standards. If water quality standards are not being met, the ROWD shall include new or revised program elements and compliance schedule(s) necessary to comply with Section VI of this Order.

B. The ROWD, annual reports and other information submitted under this Order shall be signed by either a principal executive officer or a ranking elected official (40 CFR 122.22(a)(3)) or a duly authorized representative as per 40 CFR 122.22(b).

C. This Order shall serve as an NPDES Permit pursuant to Section 402(p) of the Clean Water Act, or amendments thereto, and shall become effective ten days after the date of its adoption provided the Regional Administrator of the USEPA has no objections. If the Regional Administrator objects to its issuance, the Permit shall not become effective until such objection is withdrawn.

D. The Regional Board is authorized to enforce the terms of this permit under several provisions of the CWC, including, but not limited to, sections 13385, 13386, and 13387.

E. Order No. R8-2002-0011 is hereby rescinded.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on XXXX(**___DATE), 2009.**

_____

Gerard J. Thibeault
Executive Officer

APPENDIX 1

PERMITTED AREA

ORDER NO. R8-2009-0033

APPENDIX 2

OTHER ENTITIES THAT MAY DISCHARGE POLLUTANTS TO THE MS4

ORDER NO. R8-2009-0033

APPENDIX 3

MONITORING AND REPORTING PROGRAM

ORDER NO. R8-2009-0033

APPENDIX 4

GLOSSARY

ORDER NO. R8-2009-0033

APPENDIX 5

NOTICE OF INTENT AND NOTICE OF TERMINATION

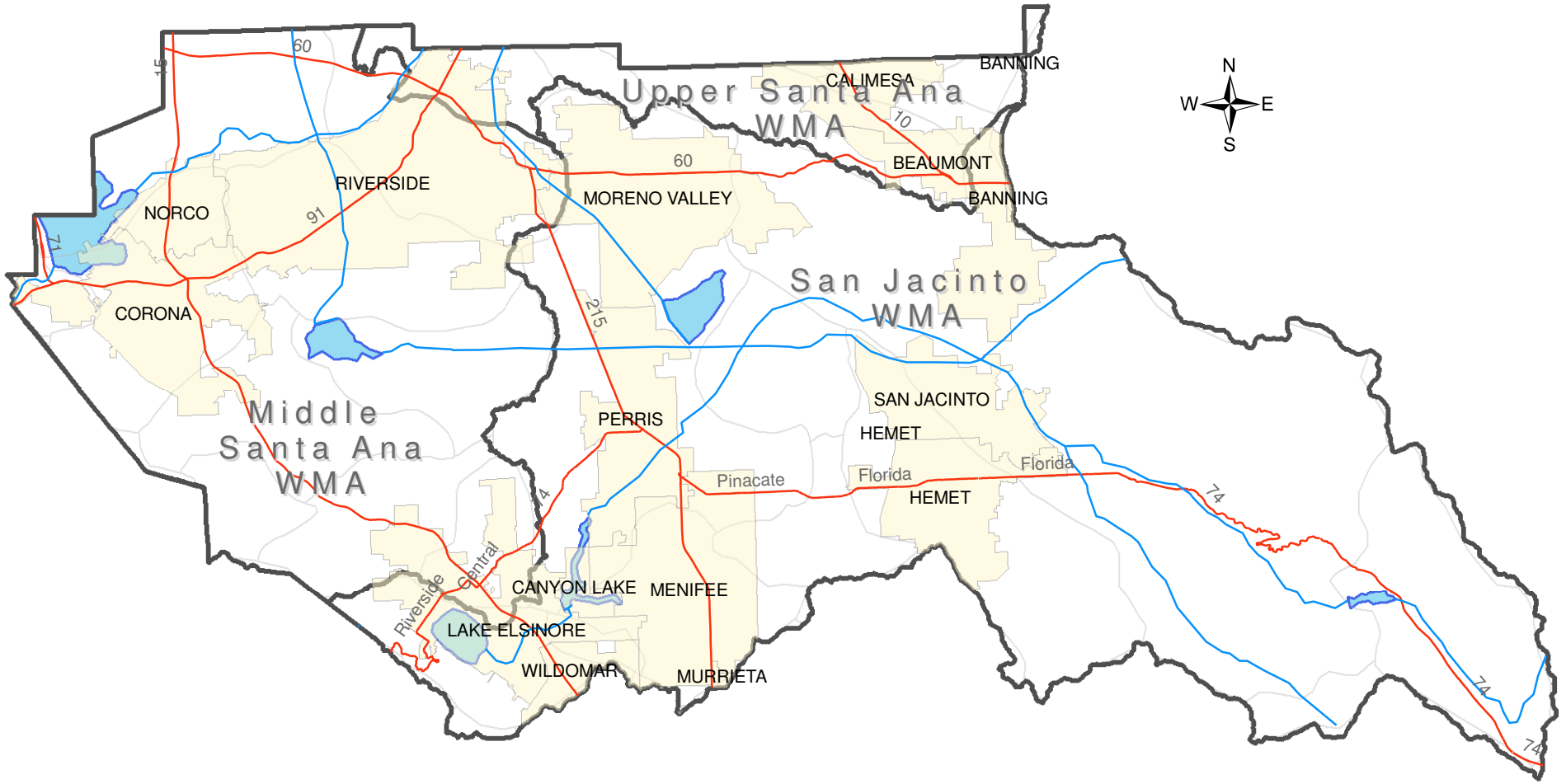
ORDER NO. R8-2009-0033

APPENDIX 6

FACT SHEET

ORDER NO. R8-2009-0033

ORDER NO. R8-2009-0033 (NPDES NO. CAS 618003)
RIVERSIDE AREA-WIDE URBAN STORM WATER RUNOFF MANAGEMENT PLAN



APPENDIX 1

Appendix 2

OTHER POTENTIAL DISCHARGERS TO THE MS4s

Government Agencies

Department of the Air Force,
March Air Force Base – Special Districts
(regulated under an individual NPDES permit)
State Parks
U.S. Army Corps of Engineers
Caltrans (regulated under a state-wide NPDES permit)
Department of Corrections
U.S. Forest Service

Hospitals

Corona Community Hospital
Hemet Valley Medical Center
Kaiser Foundation Hospital – Riverside
Loma Linda Hospital (Sun City)
Parkview Memorial Hospital
Riverside Community Hospital
Riverside County Regional Medical Center
Riverside General Hospital

Railroads

AT&SF Railway Company
Burlington Northern Railroad Company
Southern Pacific Railroad Company
Union Pacific Railroad

Special Districts/ Wastewater Agencies

Edgemont Community Services District
Jurupa Community Services District
Santa Ana Watershed Project Authority
Rubidoux Community Services District
Valley Wide Park and Recreation District

School Districts

Alvord Unified School District
Corona – Norco Unified School District
Hemet Unified School District
Lake Elsinore Unified School District
Menifee Union School District
Moreno Valley Unified School District
Nuview Union School District
Perris Elementary School District
Perris Union High School District
Riverside Unified School District
Romoland School District
San Jacinto Unified School District
Val Verde School District

Universities and Colleges

California Baptist University
La Sierra University
Mt. San Jacinto College
Riverside Community College
University of California, Riverside

Water Districts

Eastern Municipal Water District
Elsinore Valley Municipal Water District
Lake Hemet Municipal Water District
Lee Lake Water District
Metropolitan Water District
Western Municipal Water District

State of California
California Regional Water Quality Control Board
Santa Ana Region

Monitoring and Reporting Program No. R8-2009-0033
NPDES No. CAS618033

for
Riverside County Flood Control and Water Conservation District,
The County of Riverside and the Cities of Riverside County
Within the Santa Ana Region
AREA-WIDE URBAN STORM WATER RUNOFF MANAGEMENT PROGRAM

I. OBJECTIVES

The overall goal of the urban storm water runoff monitoring program is to support the development of an effective urban storm water runoff management program. The following are the major objectives:

A. To identify those receiving waters, which, without additional action to control pollution from urban storm water runoff, cannot reasonably be expected to achieve or maintain applicable water quality standards required to sustain the designated beneficial uses, the goals, and the objectives of the Basin Plan.

B. To develop and support an effective MS4 management program.

C. To identify significant water quality problems, related to discharges of urban storm water runoff within the permitted area.

D. To determine water quality status, trends, and pollutants of concern associated with urban storm water runoff and their impact on the beneficial uses of the receiving waters.

E. To analyze and interpret the collected data to determine the impact of urban storm water runoff and/or validate relevant water quality models.

F. To characterize pollutants associated with urban storm water runoff, and to assess the influence of urban land uses on receiving water quality and the beneficial uses of receiving waters.

G. To identify other sources of pollutants in urban storm water runoff to the maximum extent possible (e.g., including, but not limited to, atmospheric deposition, contaminated sediments, other non-point sources, etc.)

H. To identify and prohibit illicit connections.

I. To identify, verify and prohibit illegal discharges.

J. To verify and to identify sources of urban storm water runoff pollutants.

K. To evaluate the effectiveness of the DAMP and WQMPs, including an estimate of pollutant reductions achieved by the site design (LID), treatment and source control BMPs implemented by the Permittees.

L. To evaluate the effectiveness of proposed urban storm water runoff management programs to protect receiving water quality.

II. GENERAL MONITORING PROVISIONS

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. All sample collection, handling, storage, and analysis shall be in accordance with test procedures under 40 CFR Part 136 (latest edition) "*Guidelines Establishing Test Procedures for the Analysis of Pollutants*," promulgated by the USEPA, the guidance being developed by the State Board pursuant to Water Code Section 13383.5, or other methods which are more sensitive than those specified in 40 CFR 136 and approved by the Executive Officer.

B. Analytical methods, target reporting limits and data reporting formats shall be comparable with California's Surface Water Ambient Monitoring Program (SWAMP) Quality Assurance Management Plan and with SWAMP's Procedures for Conducting Routine Field Measurement unless otherwise specified in this Monitoring and Reporting Program.

C. Revisions of this monitoring and reporting program (MRP) are appropriate to ensure that the Permittees are in compliance with requirements and provisions contained in this Order. Revisions may be made under the direction of the Executive Officer at any time during the term of the Order, and may include redistribution of monitoring resources to address TMDL needs, a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, or the number and size of samples collected.

D. The Executive Officer is authorized to allow the Permittees to participate in regional, statewide, national, or other monitoring programs in addition to or as part of this Urban Runoff monitoring program. Also, the Permittees are authorized to complement their Urban Runoff monitoring data with data from other monitoring sources, provided the monitoring conditions and sources are similar to those in the Santa Ana River watershed.

III. MONITORING PROGRAM

A. The Principal Permittee has been monitoring Urban Runoff and receiving waters since the first MS4 permit term. The Principal Permittee currently implements the Consolidated Monitoring Program (CMP) and participates in a number of other

storm water or TMDL related monitoring programs such as: TMDL Bacterial and Nutrient Monitoring, WLA Compliance, BMP Effectiveness, Urban Source and Trend Evaluation, Receiving Water Quality, Hydromodification and Bioassessment. The Principal Permittee shall continue to implement the CMP and continue to participate in other related monitoring programs.

B. The Principal Permittee, on behalf of the Co-Permittees, participates (through a memorandum of understanding and cooperative agreements) with the 16 member agencies of the Storm Water Monitoring Coalition (SMC). The Permittees shall continue to cooperate with other MS4 permittees (including Orange County and San Bernardino County), Southern California Coastal Water Research Project (SCCWRP), POTW operators, the dairy industry, the Santa Ana Watershed Project Authority (SAWPA), and other public and private organizations in the watershed to develop coordinated surface water quality monitoring programs, databases, and special studies as appropriate. The Regional Board supports continued coordination with SCCWRP and the SMC to facilitate and implement coordinated watershed based monitoring programs. The Permittees may use coordinated monitoring efforts such as the Middle Santa Ana and Lake Elsinore TMDL Task Forces, SCCWRP and SMC regional monitoring programs to address partially, or in full, the requirements of this Monitoring and Reporting Program. A proposed coordinated monitoring program shall result in the development and implementation of a monitoring plan that:

1. Fully addresses the requirements of this Monitoring and Reporting Program;

2. Describes how the external monitoring programs address the requirements of the Monitoring and Reporting Program;

3. Include a quality assurance plan , including data management, validation, verification mechanism for the portions of the monitoring directly conducted by the Permittees;

4. Reference the locations of the quality assurance plans for regional components; and

5. Result in a coordinated annual report summarizing the pertinent Urban Runoff data from the coordinated programs necessary to address this Monitoring and Reporting Program.

C. Within 12 months of adoption of this Order, the Permittees shall review the CMP, Regional and TMDL related monitoring programs that they conduct or participate to determine their effectiveness in achieving the Urban Runoff assessment requirements contained in Section IV.B, below. .If this review indicates any data gaps, the Principal Permittee shall submit a revised CMP, or coordinate revisions to other regional programs for approval of the Executive Officer to ensure that the combined efforts adequately address the requirements of Section IV.B. The

revised CMP, including a description of how other regional efforts combine with the CMP to address requirements of Section IV.B shall be submitted within 16 months of adoption of this Order and shall be implemented within six months of its approval by the Executive Officer.

D. Pending approval of the revised CMP, current monitoring efforts will continue to be implemented, as summarized in Table 1, below:

Table 1 Current Core & TMDL Monitoring Stations

Station Number	Class	Station Description	Latitude	Longitude
40	Outfall	Corona Storm Drain – Line K Harrison & Sheridan St.	33.885	-117.568611
316	Outfall	Sunnymead Chanel – Line B Alessandro & Heacock	33.917778	-117.242222
318	Outfall	Hemet Channel @ Sanderson Ave.	33.734167	-117.005556
364	Outfall	Magnolia Center – SD @ Santa Ana River	33.964722	-117.414444
702	Outfall	University Wash – Market & Bowling Green	33.9975	-117.370833
707	Outfall	North Norco Channel @ Country Club Lane	33.907778	-117.583889
752	Outfall	Perris Line J - Sunset Ave below Murrieta Rd.	33.803333	-117.2075
792	TMDL – RW*.	San Jacinto River @ Cranston Guard Station	33.7328	-116.8361
745	TMDL – RW*.	Salt Creek @ Murrieta Road	33.6871	-117.2013
759	TMDL – RW*.	San Jacinto River @ Goetz Rd	33.7517	-117.2237
741	TMDL – RW*.	San Jacinto River @ Ramona Expressway	33.8383	-117.1367
841	TMDL – RW*.	Canyon Lake spillway	33.6754	-117.2729
Starting Jan 1, 2011[1]				
318	TMDL – RW*.	Hemet Channel at Sanderson Ave.	33.73417	-117.0062
325	TMDL – RW*.	Perris Valley Storm Drain @ Nuevo Rd.	33.8011	-117.2053
827	TMDL – RW*.	San Jacinto River upstream of Lake Elsinore	33.6642	-117.293
834	TMDL – RW*.	Sierra Park Drain in Canyon Lake	33.6949	-117.2604
NS-1	TMDL – RW*.	Medowbrook (Marie St & SH 74 Perris)	33.7613	-117.2668
NS-2	TMDL – RW*.	Kitching St. & Iris Ave., Moreno Valley	33.888	-117.2174
NS-3	TMDL – RW*.	Bridge St. & SJ River, San Jacinto	33.853	-117.0683

[1] As described in Order No. R8-2004-0037, Phase 2 Monitoring in Table 11 of the "In-Lake Sediment Nutrient Reduction Plan for Lake Elsinore"; and Order No. R8-2007-0083, adopted November 30, 2007 by the Regional Board.

NS-4	TMDL – RW*.	State St., & SJ River, San Jacinto	33.819	-117.9735

*TMDL - RW. TMDL Receiving Water

E. TMDL/303(d) Listed Waterbody Monitoring: The Permittees identified as dischargers in adopted TMDLs shall continue to participate in TMDL monitoring programs as required by TMDL Implementation Plans. The compliance schedules for the two approved TMDLs within the permitted area are beyond the five year permit term. This Order requires Permittees identified as dischargers in their respective TDMLs to conduct monitoring required by the TMDL Implementation Plans to determine the effectiveness of the BMPs implemented in reducing pollutant loads and eventually to attain WLA by the deadlines specified in the respective TMDL implementation plans.

F. In addition, any requirements developed by the State Board in accordance with Water Code Section 13383.5 shall be considered during any revision of the CMP. The revised CMP shall, at a minimum, include the following:

1. Mass Emissions Monitoring – Core Stations:

   a. An estimate of flow in cubic feet per second (cfs) from the outfall/stream at the time of sampling.

   b. Monitor mass emissions in urban storm water runoff to:

      i) Estimate the total mass emissions from the MS4s to receiving waters.

      ii) Assess trends in mass emissions associated with specific urban storm water discharges from their MS4s over time; and

      iii) Determine if urban storm water runoff is contributing to exceedances of water quality objectives or beneficial uses in receiving waters by comparing results to Basin Plan water quality objectives.

      iv) Representative samples from the first sampleable storm event (based on mobilization criteria to be established in the CMP) of the rainy season (October 1 to May 31) and two more storm events shall be collected during the rainy season. A minimum of two dry-weather samples shall also be collected. Samples from the first rain event each year shall be analyzed for constituents according to the list provided in the 2007-2008 Santa Ana Region Monitoring Annual Report, Attachment A. This list includes 40 CFR 122 Appendix D Tables II and III, and Tables IV and V if expected to be present, and additional constituents. All samples shall be analyzed for *E. coli*, nutrients (Nitrates + Nitrites, potassium, and phosphorous), hardness[2], metals, pH, TSS, TOC, pesticides/herbicides, and pollutants/stressors for 303(d) listed receiving waters. Dry weather

[2] Hardness is necessary to evaluate some metal objectives in receiving waters.

samples should also include analyses for TPH (8015M – direct injection) and oil and grease. The analyte list will be reviewed annually. Constituents may be added to the list for a selected monitoring station if they are expected to be present, and removed from the list if three consecutive samples from the station have not had detectable concentrations of the constituent.

2. Water Column Toxicity Monitoring: Analyses for toxicity to aquatic species shall be performed on receiving water samples to determine the impacts of urban storm water runoff on toxicity of receiving waters. The *Ceriodaphnia dubia* survival (acute), Fathead Minnow larval survival (acute), and Selenastrum Capricornutum growth (chronic) tests shall be used to evaluate toxicity on the sample from the first rain event, plus one other wet weather sample. Where applicable, two dry weather samples shall also be collected or equivalent procedures shall be proposed in the CMP. In addition, criteria shall be identified which will trigger the initiation of Toxicity Identification Evaluations (TIEs) and Toxicity Reduction Evaluations (TREs).

   To the extent that the toxicity testing developed as part of the Regional Bioassessment Monitoring described in item 5 and Section D below, or other standardized toxicity testing protocols developed by the SWRCB, RWQCB, SMC or SCCWRP, satisfies the objective of determining the impact of Urban Runoff on toxicity of receiving waters, the Permittees may satisfy this requirement by participating in the regional bioassessment effort or conducting toxicity testing consistent with the standardized protocols.

3. Illegal Discharge/Illegal Connection Monitoring: The Permittees shall review and update their dry and wet weather reconnaissance strategies to identify and eliminate illegal discharges and illicit connections using the Guidance Manual for Illicit Discharge, Detection, and Elimination developed by the Center for Watershed Protection[3] or any other equivalent program. Where possible, the use of GIS to identify geographic areas with a high density of industries associated with gross pollution (e.g. electroplating industries, auto dismantlers) and/or locations subject to maximum sediment loss (e.g. new development) may be used to determine areas for intensive monitoring efforts.

   The dry weather monitoring for nitrogen and total dissolved solids shall be included as part of the illegal discharge/illicit connection monitoring program. Where dry weather inspection and monitoring shows flow at representative urban runoff monitoring locations, establish a baseline dry weather flow concentration for TDS and TIN.

4. Sources of Data: Where possible and applicable, data shall be obtained from monitoring efforts of other public or private agencies/entities (e.g., Caltrans).

[3] USEPA (Illicit Discharge Detection and Elimination - A Guidance Manual for Program Development and Technical Assessments) by the Center for Watershed Protection and Robert Pitt, University of Alabama, October 2004, updated 2005).

5. Bioassessment: In lieu of developing an independent bioassessment program as required in the prior term permit, the Principal Permittee, on behalf of the Co-Permittees, participates (through a memorandum of understanding and cooperative agreements) with the 16 member agencies of the Storm Water Monitoring Coalition (SMC). The SMC's Bioassessment Working Group conducts bioassessments on a regional basis. The Principal Permittee in coordination with SCCWRP shall ensure that a sufficient number of monitoring stations are selected for this program from locations within the permitted area.

   a. The Principal Permittee, in collaboration with the SMC, shall conduct sampling, analysis, and reporting of specified in-stream biological and habitat data within the 5-year permit cycle according to the protocols specified in the SCCWRP Tech Report No. 539.

   b. Within the Riverside County , the bioassessment project area consists of the lower half of the Middle Santa Ana River Watershed, the San Jacinto Watershed, and the northern Santa Margarita Watershed (northern San Diego) for a total of 1.5 watershed units, a minimum of 9 samples shall be collected per year[4]. Within Riverside County's Santa Ana and San Jacinto Watersheds, which are permitted areas of this Order, the Permittees shall sample 5 sites per year. SWAMP samples 2 sites per year.

   c. For long-term trend monitoring, the Principal Permittee shall collect a minimum of 1 sample per year during the dry weather index period, as noted in the SCCWRP Tech Report No. 539. Additional samples may be collected to improve data quality for trend analysis. At a minimum, chemistry and aquatic toxicity should be used as indicators for trend analysis.

   d. Any baseline and historic information on stream geomorphology and ecological health, including aquatic habitats, in the receiving waters and the findings from the trend analysis shall be used to evaluate the effectiveness of urban storm water management program, including the requirements specified in the Order.

6. A Quality Assurance Program Plan within the CMP that describes how data will be collected and analyzed to ensure that data is consistent with State and Regional Board monitoring programs and is of high quality. Dischargers shall develop a Quality Assurance Program Plan (QAPP), that, is comparable with the State's Surface Water Ambient Monitoring Program (SWAMP) QAPP and approved by the Regional Board's Quality Assurance Officer. A QAPP template is available, upon request, through the State Water Resources Control Board's SWAMP website (http://www.waterboards.ca.gov/water_issues/programs/swamp/qapp.shtml). All

[4] See Table 4 page 15 of Technical Report No.539.

analytical methods, target reporting limits, and data reporting formats should be SWAMP comparable unless otherwise specified in this Monitoring and Reporting Program. The QAPP will include location of sample site(s), description of analytical techniques, data quality objectives, and other standard quality assurance information.

7. A procedure for the collection, analysis, and interpretation of existing data from local, regional or national monitoring programs. These data sources may be utilized to:
   a. Characterize different sources of pollutants discharged to the MS4;
   b. Determine pollutant generation, transport and fate;
   c. Develop a relationship between land use, development size, storm size and the event mean concentration of pollutants;
   d. Determine spatial and temporal variances in urban storm water runoff quality and seasonal and other bias in the collected data; and
   e. Identify any unique features of the permitted area.
   f. The Permittees are encouraged to use data from similar studies, if available.

8. The CMP update shall include descriptions of:
   a. The number of monitoring stations;
   b. Monitoring locations within MS4s, major outfalls, and receiving waters; environmental indicators (e.g., ecosystem, flow, biological, habitat, chemical, sediment, stream health, etc.) chosen for monitoring;
   c. Total number of samples to be collected from each station, frequency of sampling during wet and dry weather, short duration or long duration storm events, type of samples (grab, 24-hour composite, etc.), justification for composite versus discrete sampling, type of sampling equipment, quality assurance/quality control procedures followed during sampling and analysis, analysis protocols to be followed (including sample preparation and maximum reporting limits), and qualifications of laboratories performing analyses;
   d. A procedure for analyzing the collected data and interpreting the results including an evaluation of the effectiveness of the management practices, a comparative analysis of the Permittees' monitoring data to the USEPA Multi-Sector Permit Parameter Benchmark Values and applicable water quality objectives specified in Chapter 4 of the Basin Plan. and need for any refinement of the WQMPs, the DAMP and or/the LIPs.
   e. Parameters selected for field screening and for laboratory work; and
   f. A description of the responsibilities of all the participants in this program, including cost sharing.

G. REGIONAL WATERSHED MONITORING

1. The objectives of the Regional Watershed Monitoring Program overseen by the State Board's Storm Water Ambient Monitoring Program (SWAMP) and the Storm Water Monitoring Coalition (SMC) and coordinated by the Southern California Coastal Water Research Project (SCCWRP) are:

   a. To assess the current status of streams in Southern California.

   b. To identify major stressors to aquatic life.

   c. To monitor the trend in water quality in Southern California streams.

2. The bioassessment discussed above, should provide information about the biological, chemical and toxicological integrity of receiving waters. Baseline and trend monitoring information on the biotic and geomorphological condition of the receiving waters should be used to evaluate the effectiveness of the Urban Runoff pollution control measures.

3. The Riverside County Regional Watershed monitoring area is within the lower half of the Middle Santa Ana River Watershed, the San Jacinto Watershed, and the northern Santa Margarita watershed (northern San Diego) for a total of 1.5 watershed units[5]. Within Riverside County's Santa Ana and San Jacinto Watersheds, the Permittees sample 5 sites per year. SWAMP samples 2 sites per year..

4. The sampling sites in each watershed unit were determined according to distribution or abundance of the three land uses: urban, agriculture, or open. The sampling grid includes 15 watershed units located from Ventura to San Diego and as far east as San Bernardino and Riverside Counties. A total of 450 samples in the 15 watershed units will be collected within a five year period to assess the spatial extent of impacts to streams within the area. Samples will be collected at sites representing each of the three land use types. Each site will be sampled only once during an index period and not all sites need to be sampled during the same year. One-fifth of the samples (90 samples) will be collected each year for the 15 watersheds. Sampling events shall be conducted between 4 to 12 weeks following the last significant rainfall. No sampling shall occur within 72 hours of any measurable rainfall. The default index period will be from May 15 to July 15. The specifics and details of the Regional Watershed Program are discussed in "The Regional Monitoring of Southern California's Watershed SMC Bioassessment Working Group", SCCWRP, Technical Report No. 539, December 2007 (The Tech Report).

[5] See Table 4 page 15 of Technical Report No.539.

5. Any baseline and historic information on stream geomorphology and ecological health, including aquatic habitats, in the receiving waters and the findings from the trend analysis shall be used to evaluate the effectiveness of Urban Runoff management program, including the requirements specified in the Order.

H. HYDROMODIFICATION MONITORING PROGRAM

This Order requires development and implementation of a hydromodification monitoring plan as part of the Watershed Action Plan to evaluate the effectiveness of hydromodification controls implemented within the permitted area (The following requirements may be satisfied by the Permittees participation in the “Development of Tools for Hydromodification Assessment and Management’ Project” undertaken by the SMC and coordinated by SCCWRP and follow on efforts to develop hydromodification monitoring guidance).

1. The Order requires the Permittees to revise the DAMP to incorporate Watershed Action Plan principles within three years of adoption of the Order. The hydromodification requirements require the permittees to identify vulnerable streams and possible control measures to minimize hydrologic impacts and tools to measure any impacts on geomorphology and aquatic resources.
2. The hydromodification monitoring program shall include:
   a. Protocols for ongoing monitoring to assess the effectiveness of hydromodification management within the permitted area.

   b. Models to predict the effects of urbanization on stream stability within the permitted area.

I. LOW IMPACT DEVELOPMENT BMP MONITORING

The Principal Permittee shall continue to participate in data collection and monitoring to assess the effectiveness of low impact development techniques in semi-arid climate as part of the SMC project titled, "Quantifying the Effectiveness of Site Design/ Low Impact Development Best Management Practices in Southern California”. The Principal Permittee is also developing a regional LID BMP testing and demonstration facility at the main office that meets the intent of this requirement (currently the facility data is intended to be integrated into the SMC project).

IV. RECORD KEEPING REQUIREMENTS

A. All monitoring activities shall meet the following requirements:

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [40 CFR 122.41(j)(1)].

2. The Permittees shall retain records of all monitoring information, including all calibration and maintenance of monitoring instrumentation, copies of all reports prepared as per this MRP and records of all data used to complete the Report of Waste Discharge and annual reports for a period of at least five years from the date of the sample, measurement, report, or application. This period may be extended by request of the Regional Board or USEPA at any time and shall be extended during the course of any unresolved litigation regarding this discharge [40 CFR 122.41(j)(2), CWC section 13383(a)].

3. Records of monitoring information shall include [40 CFR 122.41(j)(3)]:
   a. The date, exact place, and time of sampling or measurements;
   b. The individual(s) who performed the sampling or measurements;
   c. The date(s) analyses were performed;
   d. The individual(s) who performed the analyses;
   e. The analytical techniques or methods used; and
   f. The results of such analyses.

4. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this Order shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four years, or both [40 CFR 122.41(j)(5)].

5. Calculations for all effluent limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this MRP [40 CFR 122.41(l)(4)(iii)].

6. All chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by an appropriate governmental regulatory agency.

7. For priority toxic pollutants that are identified in the California Toxics Rule (CTR) (65 Fed. Reg. 31682), the Minimum Levels (MLs) published in Appendix 4 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP) shall be used for all analyses, unless otherwise specified.

8. For priority toxic pollutants, if the Permittee can demonstrate that a particular ML is not attainable, in accordance with procedures set forth in 40 CFR 136, the lowest quantifiable concentration of the lowest calibration standard analyzed by a specific analytical procedure (assuming that all the method specified sample weights, volumes, and processing steps have been followed) may be used instead of the ML listed in Appendix 4 of the SIP. The Principal Permittee must submit documentation from the laboratory to the Regional Water Board Executive Officer for approval prior to raising the ML for any constituent.

9. The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both [40 CFR 122.41(k)(2)].

B. PROGRAM EFFECTIVENESS ASSESSMENT AND REPORTING

1. All progress reports and proposed strategies and plans required by this Order shall be signed by the Principal Permittee, and copies shall be submitted to the Executive Officer under penalty of perjury.

2. The Permittees shall submit an annual report to the Executive Officer and to the Regional Administrator of the USEPA, Region 9, no later than November 30th, of each year. This progress report shall also be submitted in a mutually agreeable electronic format that is text searchable. Any monitoring data shall also be submitted in a sortable electronic format. At a minimum, the annual report shall include the following:

   a. A review of the status of program implementation and compliance (or non-compliance) with the schedules contained in this Order;

   b. An assessment of the effectiveness of control measures established under the illegal discharge elimination program and the DAMP. The effectiveness may be measured in terms of how successful the program has been in eliminating IC/IDs and/or reducing pollutant loads in urban storm water runoff, including summaries of Permittee actions to investigate and eliminate or permit IC/IDs and measures to reduce and/or eliminate the discharge of pollutants, including trash and debris

   c. As assessment of control measures and their effectiveness in addressing pollutants causing or contributing to an exceedance of water quality objectives in receiving waters that are on the 303(d) list of impaired waters. The effectiveness evaluation shall consider changes in land use and

population on the quality of receiving waters and the impact of development on sediment loading within sediment impaired receiving waters and recommend necessary changes to program implementation and monitoring needs.

d. The Principal Permittee shall compile information provided by the Co-Permittees and determine their effectiveness in attaining receiving water quality standards. This determination must include a comparative analysis of monitoring data to the applicable water quality objectives for receiving waters as specified in Chapter 4 of the Basin Plan. If the Receiving Water Limitations are not fully achieved, the Permittees must comply with the procedures identified under the Receiving Waters Limitations, Section VI, of the Order. , including any proposed modifications to the WQMPs or the DAMP.

e. An overall program assessment. The Permittees are encouraged to use the program assessment methodology described in the 2006 ROWD. The Permittees should determine, to the extent practicable, water quality improvements and pollutant load reductions resulting from implementation of various program elements. The Permittees may also use the "Municipal Storm Water Program Effectiveness Assessment Guidance" developed by the California Storm Water Quality Association in May 2007 as guidance for assessing program effectiveness at various outcome levels. The assessment should include each program element required under this Order, the expected outcome and the measures used to assess the outcome. The Permittees may propose any other methodology for program assessment using measurable targeted outcomes.

f. Description of program reviews conducted including updates to address program modifications and improvements identified during the program assessment along with implementation schedule for incorporation into the local implementation plans (LIPs).

g. An assessment of any modifications to the WQMPs, or the DAMP made to comply with CWA requirements to reduce the discharge of pollutants to the MEP;

h. A summary, evaluation, and discussion of monitoring results from the previous year and any changes to the monitoring program to be made the following year;

i. A fiscal resources analysis progress report as described in Section XVII.B of Order No. R8-2009-0033 including:

   i. Each Permittee's expenditures for the previous fiscal year;

ii. Each Permittee's budget for the current fiscal year; and

iii. A description of the source of funds.

j. A draft work plan that describes the proposed implementation of the LIPs and DAMP for next fiscal year. The work plan shall include clearly defined tasks, responsibilities, and schedules for implementation of the storm water program and each Permittee's actions for the next fiscal year;

k. Major changes in any previously submitted plans/policies;

l. If the Implementation Agreement is revised, a copy of the signature page and revisions to the Implementation Agreement.

m. A review of each Permittee's Storm Water Ordinances and their enforcement practices to assess their effectiveness in prohibiting non-exempt, non-storm water discharges to the MS4 (The Permittees may propose appropriate control measures in lieu of prohibiting these discharges, where the Permittees are responsible for ensuring that dischargers adequately maintain those control measures).

3. The Co-Permittees shall be responsible for the submittal of all required information/materials needed to comply with this order in a timely manner to the Principal Permittee. A duly authorized representative of the Co-Permittee under penalty of perjury shall sign all such submittals.

4. The monitoring data transmittals to the Regional Board shall be in the form developed by the Storm Water Monitoring Coalition (SMC) and approved by the State Water Resources Control Board in the document entitled "Standardized Data Exchange Formats". This document was developed in order to provide a standard format for all data transfer so that data can be universally shared and evaluated from various programs.

V. REPORTING SCHEDULE

All reports required by this Order shall be submitted to the Executive Officer in accordance with the following schedule:

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
III.A.1.e III.B.3.a,d,e & XVII.D.		Management Steering Committee meetings to discuss MS4 Permit implementation	Held at least twice per year.	
III.A.1.f III.B.3.a,d,e & XVII.D.		Permittee Technical Committee meetings to discuss permit implementation	Held at least 10 times each year	
III.B.3.a,d,e & XVII.D.		Co-Permittees participate in Management Steering and Technical Committee meetings to discuss MS4 Permit implementation	Attend at least 1 out of 2 Management and 8 out of 10 Technical meetings each year	
III.A.1.r		The Principal Permittee shall develop a library of BMP performance reports, and revise the BMP performance report annually thereafter.	Within 6 months of permit adoption	
III.A.1.s		The Principal Permittee shall coordinate a review of area-wide documents with the co-permittees to determine the need for update or revisions and establish a schedule for those revisions.	Within 6 months of permit adoption	
III.B.2.g		Submit up-to-date MS4 facility maps	Annually to Principal Permittee	In Annual Report
III.B.2.h		Submit reports & information for Annual Report	Annually to Principal Permittee	In Annual Report
III.C.		Evaluate Urban Runoff Management structure and Implementation Agreement annually to determine need for revision.	Annually	Report findings and schedule for revisions to the Implementation Agreement in Annual Report.
IV.A.		Principal Permittee shall develop and maintain a LIP Template	Within 12 months of adoption of Order and update annually thereafter.	
IV.B.		Complete a Co-Permittee specific LIP	Within 6 months of approval of the Template	Within 6 months of approval of the Template

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
IV.E.		Implement approved BMPs and update LIP	Within 90 days of approval of plan req'd in VII.D.2.	
IV.F.		Prepare a Co-Permittee specific LIP	Within 18 months of Order adoption.	
VI.C.1.b.		Comply with WLA for Dry Weather bacterial indicators in MSA River	Dec. 31, 2015.	
VI.C.1.c.		Comply with WLA for Wet Weather bacterial indicators in MSA River	Dec. 31, 2025.	
VI.C.1.d. iv.		Submit Tri-annual data summary and compliance evaluation report	February 15, 2010 and every 3 years thereafter.	
VI.C.2..b.		Submit Phase 2 Alternatives	December 31, 2010	
		Submit O&M for Agreement for Fishery Management Program	December 31, 2010	
		Submit O&M for Agreement for Aeration and Mixing Systems	December 31, 2010	
		Submit Phase 2 Projects Plans	June 30, 2011	
		Complete Phase 2 Project Implementation	December 31, 2014	
		Implement in-lake and watershed monitoring programs	Annual reports due August 31 every year.	
VI.C.2.c.		In-lake Processes Evaluation Study	December 31, 2008	
		Linkage Analysis Study	December 31, 2009	
		Watershed Source Loading Study	August 31, 2010	
		Model Evaluation	December 31, 2010	
		Construct/Calibrate Model	June 30, 2011	
		Conduct Model Scenarios	August 31, 2011	
		Model Update Final Report	November 30, 2011	
VI.C.2.d.		Conduct Feasibility analysis and ID Pollutant Trading Framework	March 2012	
		Create and Adopt Program Protocols and Program Implementation	August 2012	
		Submit Pollutant Trading Program	November 30, 2012	

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
VII.D.1		Notify Regional Board if Section VI.A. discharges from MS4 causes exceedance of Receiving Water Quality Objectives.	---	2 working days verbal or email notice and 30 days written from time of becoming aware of the situation.
VII.D.2		Submit modified report required under VI.D.1		30 calendar days following receipt of written notice to modify report.
VII.D.3		Report any exceedance solely due to discharges outside the Permittees jurisdiction.	Within two (2) working days of becoming aware of the situation, provide oral or e-mail notice and provide written documentation within ten (10) calendar days of becoming aware of the situation.	
VII.D.4		Modify DAMP, LIP, and MRP to address Receiving Water Limit Violations and implementation schedule.	---	60 days after approval of Subsection VI.D.1 report by Executive Officer
VII.D.5		Report discovery of exceedances of Receiving Water Standards from non-jurisdictional sources.	---	Oral or email notice within 2 working days of becoming aware of situation and written documentation within 10 days from time of becoming aware of the situation.
VIII.D.		Promulgate ordinances that would specify BMPs for known pathogen or bacterial indicator sources	Within 2 years of adoption	
VIII.H.		Review of the effectiveness of ordinances and associated enforcement programs in prohibiting illicit connections/illegal discharges to the MS4s		Annually
VIII. J.		Certification statement, signed by the Chief legal counsel, that the permittee has obtained all necessary legal authority		One year after Order adoption

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
VIII. K.		Permittees shall review adequacy of their ordinances, implementation and enforcement response procedures to properly manage, reduce and mitigate potential pollution sources within each Permittee's jurisdiction.		Annually
IX. A.		Eliminate or permit IC/IDs		60 calendar days from receipt of notice from a third party.
IX..C		Review and revise IC/ID program	One year after Order adoption	Annual Report, one year after Order adoption
IX..D.		Prepare a focused outfall reconnaissance inventory	50% completed within three years after Order adoption. 100% by end of permit term.	Status of progress annually
IX. .G.		Annually review and evaluate their IC/ID or IDDE program to determine if progress is being made.		Annually
IX..M.		Control the contribution of pollutants from its MS4 systems prior to connecting to privately owned or maintained stormwater conveyance systems.	Within 12 months of Order adoption.	One year after Order adoption
IX..M.,		Investigate spills, leaks, and/or IDs.	Immediately if notified by Permittee staff or within 24 hours of receipt of notice from third party.	Annually

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
X.D.		Review and revise, as needed, the Sanitary Sewer Overflow Unified Response Plan developed during the previous permit term to control and mitigate sanitary sewer overflows in the permit area.	Within 12 months of Order adoption.	One year after Order adoption
X.G.		Develop an inventory of septic systems within its jurisdiction to promote compliance with Assembly Bill 885 and implementing regulations[6] regarding onsite waste water treatment systems.	Within 2 years of Order adoption,	2011-2012 Annual report.
XI.A.1. & XI.A 2.		Submit a sortable electronic database of all construction, industrial, and commercial facilities within their jurisdiction that have a reasonable potential to discharge pollutants.	Starting 6 months after Order adoption. Updated at least quarterly.	Annually
XI.A.5.		Report of storm water related information gathered during site inspections of industrial, commercial, and construction sites.	Within 24 months after Order adoption	Available through an internet accessible database.
XI.A.10.		Each Permittee shall document, evaluate and annually report the effectiveness of its enforcement procedures in achieving prompt and timely compliance.		Annually

[6] http://www.waterboards.ca.gov/water_issues/programs/septic_tanks/

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
XI.B.1. & XI.B.4.		An inventory and inspection frequency of: Wet Season(Oct 1 – May 31): High = 1/mo., Med = 2/season, low = 1/season Dry Season: All construction sites shall be inspected at a frequency sufficient to ensure that sediment and other pollutants are properly controlled and that unauthorized, non-storm water discharges are prevented		Annually
XI.C.2. & XI.C.3		All high priority industrial facilities are to be inspected at least once a year; all medium priority sites are to be inspected at least once every two years; and all low priority sites are to be inspected at least once per permit cycle.		Annually
XI.D.1. & XI.D.4		All high priority sites shall be inspected at least a year; all medium priority sites shall be inspected at least every two years; and all low priority sites shall be inspected at least once per permit cycle.		Annually
XI.D.6		Notify all mobile businesses operating within the County concerning the minimum source control and pollution prevention measures that they must develop and implement.	Within 12 months of adoption of this Order	Annually
XI.D.7		The Principal Permittee shall develop an enforcement strategy to address mobile businesses.	Within 12 months of adoption of this Order	Annually

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
XI.E.1		Each Permittee shall develop and implement a residential program to reduce the discharge of pollutants from residential facilities to the MS4s to the maximum extent practicable	Within 12 months of adoption of this Order	Annually
XII.B.2.		The Principal Permittee shall facilitate the formation of a technical advisory committee (TAC)	Within 6 months of adoption of this Order	Annually
XII.B.3.		The Principal Permittee shall submit to the Regional Board a Watershed Action Plan	Within 12 months of formation of TAC.	Annually
XII.C.1.		Each Permittee shall review the watershed protection principles and policies in its General Plan	Within 12 months of adoption of this Order	Annually
XII.C.4.		Shall incorporate information into its LIP and its project approval process specified in this Section.	Within 18 months of adoption of this Order	2010-2011 Annual Report.
XII.D.1& 2.		Submit a list of project categories that Permittees have ministerial or discretionary approval authority (specify which authority).	12 months of Order adoption	
XII.D.7.		Develop recommendations for streamlining regulatory agency approval of regional treatment control BMPs.	Within 12 months of adoption of this Order	Annually
XII.E.1		Principal Permittee shall update the WQMP to incorporate LID principles,	12 months of Order adoption	
		Implement the updated WQMP.	Within six months of WQMP approval.	
XII.F.1		All waivers, along with documentation justifying the issuance of the waiver, shall be submitted to Regional Board staff in writing		Within thirty (30) calendar days of issuance of the waiver.
		Develop technically-based feasibility criteria for project evaluation to determine the feasibility of implementing LID BMPs	Within 12 months of adoption of this Order	2010-2011 Annual Report.

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
XII.E.4		Each Permittee shall identify barriers to low impact development implementation and revise ordinances, codes, building and landscape design standards to promote green infrastructure/low impact development implementation.	Within 12 months of adoption of this Order	2010-2011 Annual Report.
XII.G.		Each Permittee shall develop and implement standard procedures and tools, and include in its LIP.	Within 6 months of adoption of this Order	Annually
XII.J.3.		The Permittees shall develop a database to track operation and maintenance of post-construction BMPs.		Annually
XII.J.4		Structural treatment control BMPs, shall be inspected prior to the rainy season.	Within 12 months of adoption of this Order All public agency and 25% of priority dev. Proj. 100% within 4 years.	Annually
XII.K.		Provisions for LID and hydrologic conditions of concern included in WQMP.	Within 90 days of Order adoption, unless WQMP approved prior to Order adoption.	
XIII.A.		Review public education and outreach efforts and revise their activities to adapt to the needs identified in the annual reassessment.		Annually

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
XIII.F.		The Permittees shall develop, maintain and distribute BMP guidance for the control of those potentially polluting activities identified during the previous permit cycle, which are not otherwise regulated by any agency, including guidelines for the household use of fertilizers, pesticides, herbicides and other chemicals, and guidance for mobile vehicle maintenance, carpet cleaners, commercial landscape maintenance, and pavement cutting.	Within 12 months of adoption of this Order	Annually
XIII.J.		The Public Education Committee shall meet at least twice per year.		Annually
XIII.K..		Sponsor or staff an Urban Runoff table or booth at community, regional, and/or countywide events to distribute public education materials to the public. Each Permittee shall participate in at least one event per year.		Annually
XIII.L.		Involve public agency organizations, listed in Appendix 2, in Urban Runoff program. Notify the Regional Board of non-compliance.		Annually
XIV.A.		Review activities and facilities to determine the need for revisions to Section 5 of the DAMP and LIP.	July 1st each year.	Annually
XIIV.B.		Each Permittee shall review its inventory of fixed facilities listed in the DAMP, its field operations and drainage facilities to ensure that public agency facilities and activities do not cause or contribute to a pollution or nuisance in receiving waters.	Within 12 months of adoption of this Order	Annually
XIV.D.		Conduct inspections of its fixed facilities and field operations.	Annually	Annually

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
XIV.J.		The Principal Permittee shall evaluate the effectiveness of debris booms and their placement to address floatables in inland streams.	By July 1, 2010	
XIV.N.1.c.		Notify the Executive Officer of the proposed construction project by electronically submitting Permit Registration Documents (PRDs).	Prior to commencement of each construction project.	
XIV.N.1.d.		the Executive Officer shall be notified of the completion of the project by submitting a Notice of Termination (NOT).	Upon completion of each construction project.	
XIV.N.2.a.		Notify the Executive Officer of each proposed deminimus discharge at least 15 days prior to start of the discharge	At least 15 days prior to discharge.	At least 15 days prior to discharge.
XIV.N.2.h.		Discharge greater than 150,000 gallons.		Semi-Annual reports or for period of discharge, whichever is sooner.
XV.A., XV.E. .		Each Permitee's LIP shall describe a program to provide formal and informal training to Permittee staff and contractors that implement the provisions of this Order. Provide the specified training.	Within 12 months of adoption of this Order and annually thereafter.	Annually
XV.F.		Principal Permittee shall provide and document training to applicable public agency staff on area wide procedures such as the updated Municipal Facilities Strategy (MFS) contained in the DAMP, and any other applicable guidance and procedures developed by the Permittees to address municipal activities in fixed facilities as well as field operations, including conveyance system maintenance.	Within 12 months of adoption of this Order and every two years, thereafter.	Bi-annually

Reference		Item	Completion Time after Permit Adoption or Frequency	Report Due Date
Permit	**DAMP[(a)]**			
XIV.I*		Principal Permittee shall notify Regional Board staff		30 days prior to conducting training session.
XVI.A.		Notify of noncompliant sites within its jurisdiction.		Within 24 hours of discovery
XVI.B		All sewage spills above 1,000 gallons and all reportable quantities of hazardous waste spills as per 40CFR 117 and 302 shall be reported.		Within 24 hours of discovery
XVI.D.		Facilities operating without a proper permit.		Reported within 14 calendar days
XVI.E		Report to EO any discharge that may impair domestic water supply sources or threaten human health or the environment.		Within 24 hours of discovery
XVII.A.		Evaluate the effectiveness of the Urban Runoff management program.	By November 30 of each year.	Annually by November 30.
XVII.B.		Amended DAMP pages.		Annually
XVIII.B.		Financial analysis report		Annually
XXII.A.		Report of Waste Discharge	180 days before permit expires	Month Day, 2014
Appendix 3, III.C.		Review storm water and to determine their effectiveness in urban storm water runoff program assessment	Within 12 months of adoption of this Order	
		Submit Revised CMP	Within 16 months of adoption of this Order and implement within 6 months of approval.	
Appendix 3, III.F.		Submit Revised CMP	Within 16 months of adoption of this Order and implement within 6 months of approval.	
Appendix 3, IV.B.2.		Annual Report	Annually	November 30th

(a) This column to be completed by Permitees.

Date:_____ Ordered by_____

Gerard J. Thibeault
Executive Officer

Appendix 4, GLOSSARY

40 CFR – Code of Federal Regulations Title 40: Protection of the Environment.

Annual Report – Report summarizing compliance information required to be submitted annually to the Regional Board on or before each November 30th.

APN – Assessor's parcel number

Basin Plan – Water Quality Control Plan developed by the Regional Board for the Santa Ana River Watershed.

BAT [Best Available Technology] – Technology-based standard established by Congress in CWA Section 402(p)(3)(A) for industrial dischargers of storm water. Technology-based standards establish the level of Pollutant reductions that dischargers must achieve, typically by treatment or by a combination of Source Controls and Structural BMPs. BAT generally emphasizes treatment methods first and pollution prevention and source control BMPs secondarily. The best economically achievable technology that will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants is determined in accordance with regulations issued by the USEPA Administrator. Factors relating to the assessment of BAT shall take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, the cost of achieving such effluent reduction, non-water quality environmental impact (including energy requirements), and such other factors as the permitting authority deems appropriate.

BCT [Best Conventional Technology] – Treatment techniques, processes and procedure innovations, and operating methods that eliminate or reduce chemical, physical, and biological Pollutant constituents.

Beneficial Use – Uses of water necessary for the survival or well being of man, plants, and wildlife. These uses of water serve to promote the tangible and intangible economic, social, and environmental goals. "Beneficial Uses" that may be protected include, but are not limited to: domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. Existing Beneficial Uses are those that were attained in the surface or ground water on or after November 28, 1975; and potential Beneficial Uses are those that would probably develop in future years through the implementation of various control measures. "Beneficial Uses" are equivalent to "Designated Uses" under federal law. [California Water Code Section 13050(f)] Beneficial Uses for the Receiving Waters are identified in the Basin Plan.

Biological Integrity – Defined in Karr J.R. and D.R. Dudley. 1981. Ecological perspective on water quality goals. Environmental Management 5:55-68 as: "A balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of natural habitat of the region." Also referred to as ecosystem health.

BMP [Best Management Practices] – Defined in 40 CFR 122.2 as schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of Waters of the U.S. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. In the case of MS4 permits, BMPs are typically used in place of numeric effluent limits.

Caltrans – California Department of Transportation.

CAP – Compliance Assistance Program is a Riverside County Environmental Health Department program that includes a storm water survey and educational outreach as part of existing inspections of hazardous material handlers and retail food service activities. Hazardous waste handling facilities are inspected at least once during a two-year cycle. Restaurants are inspected at least once during the permit cycle. Any completed surveys that indicate non-compliance are forwarded to the appropriate jurisdiction's code enforcement division. The Permittees notify Regional Board staff when conditions are observed during such inspections that appear to violate the General Storm Water Permits or a permit issued by the Regional Board.

CIEP – Compliance Inspection and Enforcement Program

CEQA – California Environmental Quality Act (Section 21000 et seq. of the California Public Resources Code).

Cleaning – Removal of litter or debris that can impact Receiving Waters.

CMP – Consolidated Program for Water Quality Monitoring

Conditions of Concern – Scour, erosion (sheet, rill and/or gully), aggradation (raising of a streambed from sediment deposition), and changes in fluvial geomorphology, hydrology or the aquatic ecosystem.

Contamination – As defined in the Porter-Cologne Water Quality Control Act, contamination is "an impairment of the quality of waters of the State by Waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease." Contamination includes any equivalent effect resulting from the disposal of Waste whether or not Waters of the U.S. are affected.

Co-Permittees – County of Riverside and the cities of Beaumont, Calimesa, Canyon Lake Corona Hemet, Lake Elsinore, Menifee, Murrieta, Moreno Valley Norco, Perris, Riverside, San Jacinto and Wildomar.

County – County of Riverside, a legal subdivision of the State of California.

CWA – Federal Clean Water Act

DAMP [Drainage Area Management Plan] – The DAMP is a programmatic document developed by the Permittees and approved by the Executive Officer that outlines the major

programs and policies that the Permittees individually and/or collectively implement to manage Urban Runoff in the Permitted Area.

Discretionary Project – per California Public Resources Code Sections 21065, 21080(a) and Section 15357 of the Guidelines for CEQA**.** "Project" means an activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and which is any of the following:

(a) An activity directly undertaken by any public agency.

(b) An activity undertaken by a person which is supported, in whole or in part, through contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.

(c) An activity that involves the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.

"Discretionary project" means a project which requires the exercise of judgment or deliberation when the public agency or body decides to approve or disapprove a particular activity, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, or regulations. A timber harvesting plan submitted to the State Forester for approval under the requirements of the Z'berg-Nejedly Forest Practice Act of 1973 (Pub. Res. Code Sections 4511 et seq.) constitutes a discretionary project within the meaning of the California Environmental Quality Act. Section 21065(c). Except as otherwise provided in this division, this division shall apply to discretionary projects proposed to be carried out or approved by public agencies, including, but not limited to, the enactment and amendment of zoning ordinances, the issuance of zoning variances, the issuance of conditional use permits, and the approval of tentative subdivision maps unless the project is exempt from this division.

Effective Impervious Area (EIA) – EIA is the portion of the total impervious area that is directly connected to the drainage collection system. EIA includes street surfaces, paved driveways connecting to the street, rooftops which are hydraulically connected to the curb or storm sewer system, and paved parking lots that drain to a storm sewer system.

Impervious area such as rooftops, streets, sidewalks, and parking areas do not allow water to drain into the soil. Impervious area that collects and drains the water directly to a stream or wetland system via pipes or sheet flow is considered “effective impervious area” because it effectively drains the landscape. Impervious area that drains to landscaped areas, swales, parks and other impervious areas is considered “ineffective” because the water is allowed to infiltrate through the soil and into ground water, without a direct connection to the stream or wetland.

Reducing effective impervious area is defined as disconnecting impervious surfaces such as sidewalks, rooftops, parking areas, and streets, from the drainage system so that runoff percolates into the soil and does not flow directly to streams. Disconnecting the stormwater system allows the watersheds’ hydrologic cycle to respond in a manner that more closely reflects pre-disturbed conditions. EIA reduction can occur as part of new development, redevelopment, or be part of a retrofit design. The level of benefit is determined by how well the practices minimize runoff in small to mid size storm events.

Effectiveness Assessment Outcome Level 1 - Compliance with Activity-based Permit Requirements – Level 1 outcomes are those directly related to the implementation of specific activities prescribed by this Order or established pursuant to it.

Effectiveness Assessment Outcome Level 2 - Changes in Attitudes, Knowledge, and Awareness – Level 2 outcomes are measured as increases in knowledge and awareness among target audiences such as residents, businesses, and municipal employees.

Effectiveness Assessment Outcome Level 3 - Behavioral Change and BMP Implementation – Level 3 outcomes measure the effectiveness of activities in affecting behavioral change and BMP implementation.

Effectiveness Assessment Outcome Level 4 - Load Reductions – Level 4 outcomes measure load reductions which quantify changes in the amounts of pollutants associated with specific sources before and after a BMP or other control measure is employed.

Effectiveness Assessment Outcome Level 5 - Changes in Urban Runoff and Discharge Quality – Level 5 outcomes are measured as changes in one or more specific constituents or stressors in discharges into or from MS4s.

Effectiveness Assessment Outcome Level 6 - Changes in Receiving Water Quality – Level 6 outcomes measure changes to receiving water quality resulting from discharges into and from MS4s, and may be expressed through a variety of means such as compliance with water quality objectives or other regulatory benchmarks, protection of biological integrity, or beneficial use attainment.

Effluent Limitations – Limitations on the volume of each waste discharge and the quantity and concentrations of pollutants in the discharge. The limitations are designed to ensure that the discharge does not cause water quality objectives to be exceeded in the receiving water and does not adversely affect beneficial uses.

Emergency Situation – At a minimum, sewage spills that could impact water contact recreation, all sewage spills above 1,000 gallons, an oil spill that could impact wildlife, a hazardous material spill where residents are evacuated, all reportable quantities of hazardous waste spills as per 40CFR 117 and 302, and any incident reportable to the OES (1-800-852-7550).

Erosion and Sediment Control Plan (ESCP) – These are water quality protection plans that include control measures for erosion prevention and sediment controls that would minimize the mobilization of sediment from the project site.

Executive Officer - The Executive Officer of the Regional Board

General Construction Permit- State Board Order No. 99-08 DWQ (NPDES No. CAS000002) or the most recent draft of the General Construction Permit.

General Dairy Permit- – Regional Board Order No. 99-11 (NPDES No. CAG018001) for concentrated animal feeding operations.

General De Minimus Discharges Permit- Regional Board Order No. R8-2009-0003.

General Industrial Permit – General Permit for Storm Water Discharges Associated with Industrial Activities, **State Board Order No. 97-03 DWQ (NPDES No. CAS000001).**

General Small Linear Underground Projects Permit-– State Board Order No. 2003-0007-DWQ (NPDES No. CAS000005) for discharges of storm water runoff associated with small linear underground/overhead construction projects.

General Stormwater Permits – General Industrial Permit (State Board Order No. 97-03 DWQ, NPDES No. CAS000001), General Construction Permit (State Board Order No. 99-08 DWQ, NPDES No. CAS000002), and General Small Linear Underground Projects Permit (State Board Order No. 2003-0007-DWQ, NPDES No. CAS000005)..

General Utility Vaults Permit-– State Board Order No. 2006-0008-DWQ, NPDES No. CAG990002.

Green Infrastructure –This is a concept that highlights the importance of the natural environment in decisions about land use planning. In particular there is an emphasis on the "life support" functions provided by a network of natural ecosystems, with an emphasis on connectivity to support long term sustainability. (Also see Low Impact Development.)

GIS – Geographical Information Systems.

Hazardous Material – Any substance that poses a threat to human health or the environment due to its toxicity, corrosiveness, ignitability, explosive nature or chemical reactivity. These also include materials named by the USEPA to be reported if a designated quantity of the material is spilled into the Waters of the U.S. or emitted into the environment.

Hazardous Waste – defined as "any waste, which, under Section 600 of Title 22 of this code, is required to be managed according to Chapter 30 of Division 4.5 of Title 22 of this code." [CCR Title 22, Division 4.5, Chapter 11, Article1]

Hydromodification - the "alteration of the hydrologic characteristics of coastal and non-coastal waters, which in turn could cause degradation of water resources."[1] (USEPA 2007)

IC/ID – Illicit Connection/Illegal Discharge

Illegal Discharge –Defined at 40 CFR 122.26(b)(2) as any discharge to the MS4 that is not composed entirely of storm water, except discharges pursuant to an NPDES permit, discharges that are identified in Section V.A. of this Order, and discharges authorized by the Executive Officer.

[1] USEPA. 2007. *National Management Measures to Control Nonpoint Source Pollution from Hydromodification.* EPA 841-B-07-002. U.S. Environmental Protection Agency, Office of Water, Washington DC

Illicit Connection – Any connection to the MS4 that is prohibited under local, state, or federal statutes, ordinances, codes, or regulations. The term Illicit Connection includes all non storm-water discharges and connections except discharges pursuant to an NPDES permit, discharges that are identified in Section V, Effluent Limitations and Discharge Specifications, of this Order, and discharges authorized by the Executive Officer.

Impaired Waterbody – Section 303(b) of the CWA requires each of California's Regional Water Quality Control Boards to routinely monitor and assess the quality of waters of their respective regions. If this assessment indicates that Beneficial Uses are not met, then that waterbody must be listed under Section 303(d) of the CWA as an Impaired Waterbody. The 2006 water quality assessment found a number of water bodies within the Permit Area as impaired pursuant to Section 303(d). In the Permit Area, these include: Canyon Lake (for pathogens); Lake Elsinore (for PCBs and unknown toxicity); Lake Fulmor (for pathogens); Santa Ana River, Reach 3 (pathogens); and Santa Ana River, Reach 4 (for pathogens).

Implementation Agreement – The Implementation Agreement establishes the responsibilities of each Permittee and a procedure for funding the shared costs.

Impressions – The most common measure is "gross Impressions" that includes repetitions. This means if the same person sees an advertisement or hears a radio or sees a TV advertisement a thousand times, that will be counted as 1000 Impressions.

LA – [Load Allocations] – Distribution or assignment of TMDL Pollutant loads to entities or sources for existing and future nonpoint sources, including background loads.

Land Disturbance – The clearing, grading, excavation, stockpiling, or other construction activity that result in the possible mobilization of soils or other Pollutants into the MS4. This specifically does not include routine maintenance activity to maintain the original line and grade, hydraulic capacity, or original purpose of the facility. This also does not include emergency construction activities required to protect public health and safety. The Permittees should first confirm with Regional Board staff if they believe that a particular routine maintenance activity is exempt under this definition from the General Construction Activity Storm Water Permit or other Orders issued by the Regional Board.

Local Implementation Plan (LIP) – A document that describes each Permittee's internal procedures for implementation of the various program elements described in the DAMP and this Order.

Low Impact Development (LID) – A storm water management and land development strategy that combines a hydrologically functional site design with pollution prevention measures to compensate for land development impacts on hydrology and water quality. The approach emphasizes conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions. Low Impact Development methods mimic the predevelopment site hydrology by using site design techniques that store, infiltrate, evaporate, and detain runoff. Low impact development and green infrastructure are used interchangeably. LID is an innovative storm water management approach with a basic principle that is modeled after nature: manage rainfall at the source using site design techniques that store, infiltrate, bio-treat, evaporate and detain runoff. LID's goal is to mimic a site's predevelopment hydrology

by using design techniques that infiltrate, bio-treat, store, evaporate and detain runoff close to its source. A goal of LID is to use site and subdivision design techniques in coordination with storm water management engineering to mimic the hydrologic conditions associated with an undeveloped site. LID principles are based on controlling storm water at the source by the use of microscale controls that are distributed throughout the site. This is unlike conventional approaches that typically convey and manage runoff in large facilities located at the base of drainage areas. These multifunctional site designs incorporate alternative storm water management practices such as functional landscape that act as storm water facilities, flatter grades, depression storage and open drainage swales. This system of controls can reduce or eliminate the need for a centralized best management practice (BMP) facility for the control of storm water runoff. Although traditional storm water control measures have been documented to effectively remove pollutants, the natural hydrology is still negatively affected (inadequate base flow, thermal fluxes or flashy hydrology), which can have detrimental effects on ecosystems, even when water quality is not compromised (Coffman, 2000). LID practices offer an additional benefit in that they can be integrated into the infrastructure and are more cost effective and aesthetically pleasing than traditional, structural storm water conveyance systems.

Management Steering Committee – Committee to address Urban Runoff management policies for the Permit Area and coordinate the review and necessary revisions of the DAMP and Implementation Agreement. The Management Steering Committee consists of one or more city manager or equivalent representatives from each Permittee.

MEP [Maximum Extent Practicable] *MEP is an acronym for "Maximum Extent Practicable" and refers to the standard for implementation of storm water management programs. Section 402(p)(3)(B)(iii) of the Clean Water Act requires that municipal storm water permits "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants."*

In practice, compliance with the MEP standard is evaluated by how well the Permittees implement the "minimum measures" identified by EPA, including: (1) Public education and outreach on storm water impacts; (2) Public involvement/participation; (3) Illicit discharge detection and elimination; (4) Construction site storm water runoff control; (5) Post-construction storm water management in new development and redevelopment; and (6) Pollution prevention/good housekeeping for municipal operations. Collectively, these minimum measures are often referred to as "Best Management Practices" or BMPs. The MEP standard does not require Permittees to reduce pollutant concentrations below natural background levels, nor does it necessarily require further reductions where pollutant concentrations in the receiving water already meet water quality objectives. In implementing the MEP standard, it is appropriate for Permittees to prioritize their resource allocation to address the storm water pollution problems that pose the greatest and most immediate threat to human health or the environment.

MEP is a technology-based standard established by Congress in CWA section 402(p)(3)(B)(iii) that operators of MS4s must meet. Technology-based standards establish the level of pollutant reductions that dischargers must achieve, typically by treatment or by a combination of source control and treatment control BMPs. MEP generally emphasizes pollution prevention and source control BMPs primarily (as the first line of defense) in combination with

treatment methods serving as a backup (additional line of defense). MEP considers economics and is generally, but not necessarily, less stringent than BAT. A definition for MEP is not provided either in the statute or in the regulations. Instead the definition of MEP is dynamic and will be defined by the following process over time: municipalities propose their definition of MEP by way of their urban runoff management programs. Their total collective and individual activities conducted pursuant to the urban runoff management programs becomes their proposal for MEP as it applies both to their overall effort, as well as to specific activities (e.g., MEP for street sweeping, or MEP for MS4 maintenance). In the absence of a proposal acceptable to the Regional Board, the Regional Board defines MEP.

In a memo dated February 11, 1993, entitled "Definition of Maximum Extent Practicable," Elizabeth Jennings, Senior Staff Counsel, SWRCB addressed the achievement of the MEP standard as follows:

"To achieve the MEP standard, municipalities must employ whatever Best management Practices (BMPs) are technically feasible (i.e., are likely to be effective) and are not cost prohibitive. The major em hasis is on technical feasibility. Reducing pollutants to the MEP means choosing effective BMPs, and rejecting applicable BMPS only where other effective BMPS will serve the same purpose, or the BMPS would not be technically feasible, or the cost would be prohibitive. In selecting BMPS to achieve the MEP standard, the following factors may e useful to consider:

a. Effectiveness: Will the BMPS address a pollutant (or pollutant source) of concern?

b. Regulatory Compliance: Is the BMP in compliance with storm water regulations as well as other environmental regulations?

c. Public Acceptance: Does the BMP have public support?

d. Cost: Will the cost of implementing the BMP have a reasonable relationship to the pollution control benefits to be achieved?

e. Technical Feasibility: Is the BMP technically feasible considering soils, geography, water resources, etc?

The final determination regarding whether a municipality has reduced pollutants to the maximum extent practicable can only be made by the Regional or State Water Boards, and not by the municipal discharger. If a municipality reviews a lengthy menu of BMPS and chooses to select only a few of the least expensive, it is likely that MEP has not been met. On the other hand, if a municipal discharger employs all applicable BMPS except those where it can show that they are not technically feasible in the locality, or whose cost would exceed any benefit derived, it would have met the standard. Where a choice may be made between two BMPS that should provide generally comparable effectiveness, the discharger may choose the least expensive alternative and exclude the more expensive BMP. However, it would not be acceptable either to reject all BMPS that would address a pollutant source, or to pick a BMP base solely on cost, which would be clearly less effective. In selecting BMPS the municipality must make a serious attempt to comply and practical solutions may not be lightly rejected. In any case, the burden would be on the municipal discharger to show compliance with

its permit. After selecting a menu of BMPS, it is the responsibility of the discharger to ensure that all BMPS are implemented."

MS4 – **[Municipal Separate Storm Sewer System]** – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, natural drainage features or channels, modified natural channels, man-made channels, or storm drains): (i) Owned or operated by a State, city town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or designated and approved management agency under section 208 of the CWA that discharges to Waters of the U.S.; (ii) Designated or used for collecting of conveying storm water; (iii) Which is not a combined sewer; (iv) Which is not part of the POTW as defined at 40 CFR 122.2. Historic and current developments make use of natural drainage patterns and features as conveyances for Urban Runoff. Urban streams used in this manner are part of the MS4 regardless of whether they are natural, man-made, or partially modified features. In these cases, the urban stream is both an MS4 and a receiving water.

New Development – The categories of development identified in Section XI.D of this Order. New Development does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of a facility, nor does it include emergency New Development required to protect public health and safety. Dischargers should confirm with Regional Board staff whether or not a particular routine maintenance activity is subject to this Order.

New Urbanism – New Urbanism refers to the use of creative strategies to develop ways that preserve natural lands and critical environmental areas, protect water and air quality, and reuse already-developed land. This is based on principles of planning and architecture that work together to create human-scale, walkable communities that preserve natural resources.

NOI [Notice of Intent] – A NOI is an application for coverage under the General Storm Water Permits.

Non-point Source – Refers to diffuse, widespread sources of Pollution. These sources may be large or small, but are generally numerous throughout a watershed. Non-point sources, include but are not limited to urban, agricultural or industrial area, roads, highways, construction sites, communities served by septic systems, recreational boating activities, timber harvesting, mining, livestock grazing, as well as physical changes to stream channels, and habitat degradation. Non-point source Pollution can occur year round any time rainfall, snowmelt, irrigation, or any other source of water runs over land or through the ground, picks up Pollutants from these numerous, diffuse sources and deposits them into rivers, lakes and coastal waters or introduces them into ground water.

Non-storm Water – All discharges to and from a MS4 that do not originate from precipitation events (i.e., all discharges to a MS4 other than storm water). Non-storm Water includes Illicit Discharges, non-prohibited discharges and NPDES permitted discharges.

NOT - Notice of Termination – Formal notice to the Regional Board of intent to terminate water discharge for projects covered under a General Stormwater Permit.

NPDES [National Pollutant Discharge Elimination System] – Permits issued under Section 402(p) of the CWA for regulating discharge of Pollutants to Waters of the U.S.

Nuisance – As defined in the Porter-Cologne Water Quality Control Act a Nuisance is "anything which meets all of the following requirements: 1) Is injurious to health, or is indecent, or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property. 2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal. 3) Occurs during, or as a result of, the treatment or disposal of Wastes."

Numeric Effluent Limitations – A method by which "Effluent Limitations," (see above), may be prescribed for Pollutants in Waste Discharge Requirements using concentration based criteria to implement the federal NPDES regulations. When Numeric Effluent Limits are met at the "end-of-pipe," the effluent discharge generally will not cause Water Quality Standards to be exceeded in the receiving waters (i.e., Water Quality Standards will also be met).

OES – The Governor's Office of Emergency Services, an agency of the State of California.

"Only Rain Down The Storm Drain" Pollution Prevention Program – County Urban Runoff public education program.

Order – Order No. R8-2009-0033 (NPDES No. CAS618033)

Permit Area – In the Santa Ana Region, the portion of the Santa Ana River watershed that is within the County and regulated under the MS4 Permit. The Permit Area is identified on Appendix 1 as "Permittee Urban Area" and those areas under the Permittee's jurisdictions designated as "Agriculture" and "Open Space" on Appendix 1 that will convert to Permittee Urban Area when developed to industrial, commercial, or residential use during the term of the Order.

Permittees – Co-Permittees and the Principal Permittee

Party – Defined as an individual, association, partnership, corporation, municipality, state or federal agency, or an agent or employee thereof. [40 CFR 122.2]

Point Source – Any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operations, landfill leachate collection systems, vessel, or other floating craft from which pollutants are or may be discharged.

Pollutant – Broadly defined as any agent that may cause or contribute to the degradation of water quality such that a condition of Pollution or Contamination is created or aggravated.

Pollutants of Concern –Pollutants expected to be present on the project site. In developing this list, consideration should be given to the chemicals and potential Pollutants available for storm water to pick-up or transport to Receiving Waters and legacy pollutants at the project site. Pollutants of Concern for new development and significant redevelopment projects are those pollutants identified above for which a downstream waterbody is also listed as impaired under the CWA Section 303(d) list or by a TMDL.

Pollution – As defined in the Porter-Cologne Water Quality Control Act, Pollution is the alteration of the quality of the Waters of the U.S. by Waste, to a degree that unreasonably affects either of the following: A) the waters for Beneficial Uses (i.e., when the Water Quality Objectives have been violated); or B) facilities that serve these Beneficial Uses. Pollution may include Contamination.

Pollution Prevention –Defined as practices and processes that reduce or eliminate the generation of Pollutants, in contrast to source control, pollution control, treatment, or disposal.

Post-Construction BMPs – A subset of BMPs including Site Design, Source Control, and Treatment Control BMPs which detain, retain, filter or educate to prevent the release of Pollutants to surface waters during the final functional life of development.

POTW – [Publicly Owned Treatment Works] – Wastewater treatment facilities owned by a public agency.

Principal Permittee – Riverside County Flood Control and Water Conservation District [RCFC&WCD].

Public Education Committee – Committee established by the Permittees to provide oversight and guidance for the implementation of the public education program.

Rainy Season – October 1 through May 31st of each year.

RCFC&WCD – Riverside County Flood Control and Water Conservation District

Receiving Water(s) – Waters of the U.S. within the Permit Area.

Receiving Water Limitations – Requirements included in the Orders issued by the Regional Boards to assure that the regulated discharges do not violate Water Quality Standards established in the Basin Plan at the point of discharge to Waters of the U.S. Receiving Water Limitations are used to implement the requirement of CWA section 301(b)(1)(C) that NPDES permits must include any more stringent limitations necessary to meet Water Quality Standards.

Receiving Water Quality Objectives – Water Quality Objectives specified in the Basin Plan for Receiving Waters.

Region – The portion of the Santa Ana River watershed within Riverside County.

Regional Board – California Regional Water Quality Control Board, Santa Ana Region.

Riverside County – Territory within the geographical boundaries of the County.

ROWD [Report of Waste Discharge] – Application for issuance or re-issuance of WDRs.

Sanitary Sewer Overflow (SSO) – Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system.

SARA – Superfund Amendments and Reauthorization Act. SARA amended the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) on October 17, 1986. SARA reflected USEPA's experience in administering the complex Superfund program during its first six years and made several important changes and additions to the program. SARA:

- stressed the importance of permanent remedies and innovative treatment technologies in cleaning up Hazardous Waste sites;
- required Superfund actions to consider the standards and requirements found in other State and Federal environmental laws and regulations;
- provided new enforcement authorities and settlement tools;
- increased State involvement in every phase of the Superfund program;
- increased the focus on human health problems posed by Hazardous Waste sites;
- encouraged greater citizen participation in making decisions on how sites should be cleaned up; and
- increased the size of the trust fund to $8.5 billion.

SARA also required USEPA to revise the Hazard Ranking System (HRS) to ensure that it accurately assessed the relative degree of risk to human health and the environment posed by uncontrolled Hazardous Waste sites that may be placed on the National Priorities List (NPL).

Smart Growth Principles – Smart Growth refers to the use of creative strategies to develop ways that preserve natural lands and critical environmental areas, protect water and air quality, and reuse already-developed land.

Sediment – Soil, sand, and minerals washed from land into water. Sediment resulting from anthropogenic sources (i.e. human induced land disturbance activities) is considered a Pollutant. This Order regulates only the discharges of Sediment from anthropogenic sources and does not regulate naturally occurring sources of Sediment. Sediment may destroy fish-nesting areas, clog animal habitats, and cloud waters so that sunlight does not reach aquatic plants.

SIC [Standard Industrial Classification] – Four digit industry code, as defined by the US Department of Labor, Occupational Safety and Health Administration. The SIC Code is used to identify if a facility requires coverage under the General Industrial Activities Storm Water Permit.

Significant Redevelopment – As defined in Section XI.D.3.a.

Site Design BMPs – Any project design feature that reduces the creation or severity of potential pollutant sources or reduces the alteration of the project site's natural flow regime. Redevelopment projects that are undertaken to remove pollutant sources (such as existing surface parking lots and other impervious surfaces) or to reduce the need for new roads and other impervious surfaces (as compared to conventional or low-density new development) by

incorporating higher densities and/or mixed land uses into the project design, are also considered site design BMPs

Source Control BMPs – In general, activities or programs to educate the public or provide low cost non-physical solutions, as well as facility design or practices aimed to limit the contact between Pollutant sources and storm water or authorized Non-Storm Water. Examples include: activity schedules, prohibitions of practices, street sweeping, facility maintenance, detection and elimination of IC/IDs, and other non-structural measures. Facility design (structural) examples include providing attached lids to trash containers, canopies for fueling islands, secondary containment, or roof or awning over material and trash storage areas to prevent direct contact between water and Pollutants.

Southern California Monitoring Coalition (SMC) - A regional group working to improve monitoring program design, parameter test methods, calibrate labs, evaluate the effectiveness of BMPs, and/or advance the science and understanding of Urban Runoff impacts on Receiving Waters.

State Board – California State Water Resources Control Board

Storm Water – Storm water runoff and snow melt runoff from urban, open space, and agricultural areas consisting only of those discharges that originate from precipitation events. Storm water is that portion of precipitation that flows across a surface to the MS4 or receiving waters. Examples of this phenomenon include: the water that flows off a building's roof when it rains (runoff from an impervious surface); the water that flows into streams when snow on the ground begins to melt (runoff from a semi-pervious surface); and the water that flows from a vegetated surface when rainfall is in excess of the rate at which it can infiltrate into the underlying soil (runoff from a pervious surface). When all other factors are equal, runoff increases as the perviousness of a surface decreases. During precipitation events in urban areas, rain water may pick up and transports Pollutants through storm water conveyance systems, and ultimately to Waters of the U.S.

Storm Water Ordinance – The Storm Water/Urban Runoff Management and Discharge Control Ordinances and ordinances addressing grading and erosion control adopted by each of the Co-Permittees.

Structural BMPs – Physical facilities or controls that may include secondary containment, treatment measures, (e.g. first flush diversion, detention/retention basins, and oil/grease separators), run-off controls (e.g., grass swales, infiltration trenches/basins, etc.), and engineering and design modification of existing structures.

Subdivision Map Act - Section 65000 et seq. of the California Government Code

SWPPP [Storm Water Pollution Prevention Plan] – Plan required by the General Construction Permit to minimize and manage Pollutants to minimize Pollution from entering the MS4, identifying all potential sources of Pollution and describing planned practices to reduce Pollutants from discharging off the site.

TDS – Total dissolved solids.

Technical Committee – A committee consisting of one or more representatives from each Permittee that provides technical direction on the development of the DAMP and the implementation of the overall Urban Runoff program.

TMDL [Total Maximum Daily Load] – Maximum amount of a Pollutant that can be discharged into a water body from all sources (point and non-point) and still maintain Water Quality Standards. Under CWA Section 303(d), TMDLs must be developed for all water bodies that do not meet Water Quality Standards after application of technology-based controls.

Toxicity – Adverse responses of organisms to chemicals or physical agents ranging from mortality to physiological responses such as impaired reproduction or growth anomalies.

Treatment Control BMPs – Any engineered system designed and constructed to remove pollutants from urban runoff. Pollutant removal is achieved by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process.

TSS – Total suspended solids.

Uncontaminated Pumped Groundwater – Groundwater that meets the surface Water Quality Objectives specified in the Basin Plan to which it is proposed to be discharged.

Urban Runoff – Urban Runoff includes those discharges from residential, commercial, industrial, and construction areas within the Permit Area and excludes discharges from feedlots, dairies, and farms. Urban Runoff discharges consist of storm water and non-storm water surface runoff from drainage sub-areas with various, often mixed, land uses within all of the hydrologic drainage areas that discharge into the Waters of the U.S. In addition to Urban Runoff, the MS4s regulated by this Order receive flows from agricultural activities, open space, state and federal properties and other non-urban land uses not under the control of the Permittees. The quality of the discharges from the MS4s varies considerably and is affected by, among other things, past and present land use activities, basin hydrology, geography and geology, season, the frequency and duration of storm events, and the presence of past or present illegal and allowed disposal practices and Illicit Connections.

The Permittees lack legal jurisdiction over storm water discharges into their respective MS4s from agricultural activities, California and federal facilities, utilities and special districts, Native American tribal lands, wastewater management agencies and other point and non-point source discharges otherwise permitted by or under the jurisdiction of the Regional Board. The Regional Board recognizes that the Permittees should not be held responsible for such facilities and/or discharges. Similarly, certain activities that generate Pollutants present in Urban Runoff are beyond the ability of the Permittees to eliminate. Examples of these include operation of internal combustion engines, atmospheric deposition, brake pad wear, tire wear, residues from lawful application of pesticides, nutrient runoff from agricultural activities, and leaching of naturally occurring minerals from local geography.

USEPA – United States Environmental Protection Agency

Waste – As defined in Water Code Section 13050(d), "Waste includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal." Article 2 of CCR Title 23, Chapter 15 (Chapter 15) contains a waste classification system that applies to solid and semi-solid waste that cannot be discharged directly or indirectly to waters of the state and which therefore must be discharged to land for treatment, storage, or disposal in accordance with Chapter 15. There are four classifications of waste (listed in order of highest to lowest threat to water quality): hazardous waste, designated waste, non-hazardous solid waste, and inert waste.

Waste Discharge Requirements – As defined in Section 13374 of the California Water Code, the term "Waste Discharge Requirements" is the equivalent of the term "permits" as used in the Federal Water Pollution Control Act, as amended. The Regional Board usually reserves reference to the term "permit" to Waste Discharge Requirements for discharges to surface Waters of the U.S.

WLA – see Waste Load Allocations

Water Code – California Water Code

Waters of the U.S. – Waters of the U.S. can be broadly defined as navigable surface waters and all tributary surface waters to navigable surface waters. Groundwater is not considered to be a Waters of the U.S. As defined in 40 CFR 122.2, the Waters of the U.S. are defined as: (a) All waters, which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (b) All interstate waters, including interstate "wetlands;" (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) Which are used or could be used for industrial purposes by industries in interstate commerce; (d) All impoundments of waters otherwise defined as Waters of the U.S. under this definition; (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition; (f) The territorial seas; and (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition. Waters of the U.S. do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the USEPA.

Water Quality Objectives – Numerical or narrative limits on constituents or characteristics of water designated to protect designated Beneficial Uses of the water [California Water Code Section 13050 (h)]. California's Water Quality Objectives are established by the State and Regional Boards in the Water Quality Control Plans. As stated in the Porter-Cologne requirements for discharge (California Water Code 13263): "(Waste discharge) requirements shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the Beneficial Uses to be protected, the water objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of

Section 13241." Numeric or narrative limits for Pollutants or characteristics of water designed to protect the Beneficial Uses of the water. In other words, a Water Quality Objective is the maximum concentration of a Pollutant that can exist in a receiving water and still generally ensure that the Beneficial Uses of the receiving water remain protected (i.e., not impaired). Since Water Quality Objectives are determined specifically to protect the Beneficial Uses, when the objectives are violated the Beneficial Uses are, by definition, no longer protected and become impaired. Equally fundamental is Porter Cologne's definition of Pollution. These underlying definitions (regarding beneficial use and Pollution) are the reason why all discharge requirements implementing the federal NPDES regulations require compliance with Water Quality Objectives. Water Quality Objectives are also called water quality criteria in the CWA.

Water Quality Standards –The water quality goals of a waterbody (or a portion of the waterbody) designating Beneficial Uses to be made of the water and the Water Quality Objectives or criteria necessary to protect those uses.

Watershed – That geographical area which drains to a specified point on a watercourse, usually a confluence of streams or rivers (also known as drainage area, catchments, or river basin).

Watershed Action Plan (WAP) – Integrated plans for managing a watershed that include consideration of water quality, hydromodification, water supply and habitat protection.

WDID [Waste Discharge Identification] – Identification number provided by the State when a Notice of Intent is filed.

Waste Load Allocations – Maximum quantity of pollutants a discharger of waste is allowed to release into a particular waterway, as set by a regulatory authority. Discharge limits usually are required for each specific water quality criterion being, or expected to be, violated. Distribution or assignment of TMDL pollutant loads to entities or sources for existing and future point sources.

WQMP – Water Quality Management Plan as discussed in Section 6 of the DAMP.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD – SANTA ANA REGION

NOTICE OF INTENT

TO COMPLY WITH THE TERMS OF THE RIVERSIDE COUNTY MUNICIPAL STORMWATER PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

ORDER No. R8-2009-0033 (NPDES No. CAS618033)

MARK ONLY ONE ITEM 1. ☐ New Construction 2. ☐ Reconstruction 3. ☐ Change of Information for WDID# _____

I. OWNER

Name	Contact Person		
Mailing Address	Title		
City	State	Zip	Phone ( ) – Fax ( ) – Email :

II. CONTRACTOR INFORMATION

Name	Contact Person		
Local Mailing Address	Title		
City	State	Zip	Phone ( ) – Fax ( ) – Email:

III. SITE INFORMATION

A. Project Title	Site Address		
City	State	Zip	Contact Person Phone ( ) –
B. Construction commencement date: (Month / Day / Year)	C. Projected construction completion date: (Month / Day / Year)		

D. Type of Work: ☐ Utility ☐ Flood Control ☐ Transportation ☐ Other (Specify) Description of Work: _____	E. Total size of site: _____ Acres

IV. RECEIVING WATER INFORMATION

A. Does the storm water runoff from the construction site discharge to (Check all that apply):
1. ☐ Indirectly to waters of the U.S.
2. ☐ Storm drain system - Enter owner's name:_____
3. ☐ Directly to waters of U.S. (e.g. , river, lake, creek, stream, bay, ocean, etc.)

V. IMPLEMENTATION OF NPDES PERMIT REQUIREMENTS

A. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (mark one)
- ☐ A SWPPP has been prepared for this facility and is available for review
- ☐ A SWPPP will be prepared and ready for review by (date): ___/___/___

B. Date WQMP approved by local agency: ___/___/___ ☐ Not Applicable.

C. MONITORING PROGRAM (MP) (mark one)
- ☐ A MP has been prepared for this facility and is available for review
- ☐ A MP will be prepared and ready for review by (date): ___/___/___

VI. CERTIFICATIONS

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. In addition, I certify that the Provisions No. 15-20 of Order No. 96-30, including the development and implementation of a Storm Water Pollution Prevention Plan and a Monitoring Program Plan, will be complied with."

Printed Name: _____ **Title:** _____

Signature: _____ **Date:** _____

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD – SANTA ANA REGION

NOTICE OF TERMINATION

OF COVERAGE UNDER THE RIVERSIDE COUNTY MUNICIPAL STORMWATER PERMIT
FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY

ORDER No. R8-2009-0033 (NPDES No. CAS618033)

I. OWNER

Name	Contact Person		
Mailing Address	Title		
City	State	Zip	Phone ( ) – Fax ( ) – Email:

II. SITE INFORMATION

A. Original Project Title/WDID assigned by Regional Board.	Site Address		
City	State	Zip	Phone ( ) –
B. Contractor Name	Contact Person		
Local Mailing Address	Title		
City	State	Zip	Phone ( ) – Fax ( ) – Email:

III. BASIS OF TERMINATION

__ 1. The construction project is completed and the following conditions have been met.

- ☐ All elements of the Storm Water Pollution Prevention Plan have been completed.
- ☐ Construction materials and waste have been disposed of properly.
- ☐ The site is in compliance with all local storm water management requirements.
- ☐ A post-construction storm water operation and management plan is in place (Attach a description of the post construction BMPs, the location (Latitude /Longitude), and a map of the locations of the PCBMPs).
- ☐ Date Field Verification Inspection performed. ___/___/___

__ 2. Construction activities have been suspended; either temporarily ____ or indefinitely ___ and the following conditions have been met.

- ☐ All elements of the Storm Water Pollution Prevention Plan have been completed.
- ☐ Construction materials and waste have been disposed of properly.
- ☐ An effective combination of erosion and sediment control is in place for all denuded areas and other areas of potential erosion.
- ☐ The site is in compliance with all local storm water management requirements.

Date of suspension ____ / ____ / ____ Expected start up date ____ / ____ / ____

IV. CERTIFICATION

I certify under penalty of law that all storm water discharges associated with construction activity from the identified site that are authorized by NPDES General Permit No. CAS000002 have been eliminated or that I am no longer the owner of the site. I understand that by submitting this Notice of Termination, I am no longer authorized to discharge storm water associated with construction activity under the General Permit, and that discharging pollutants in storm water associated with construction activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this Notice of Termination does not release an owner of liability for any violation of the General Permit or the Clean Water Act.

Printed Name: _____ **Title:** _____

Signature: _____ **Date:** _____

State of California

California Regional Water Quality Control Board

Santa Ana Region

3737 Main Street, Suite 500

Riverside, CA 92501- 3348

FACT SHEET
August 3, 2009

ITEM: 2

SUBJECT: Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the County of Riverside, and the Incorporated Cities of Riverside County within the Santa Ana Region, Urban Runoff Management Program, Order No. R8-2009-0033 (NPDES No. CAS 618033)

I. INTRODUCTION

A. PROJECT

The attached pages contain information concerning an application for renewal of Waste Discharge Requirements and a National Pollutant Discharge Elimination System (NPDES) permit, Order No. R8-2009-0033 (Order), NPDES No. CAS 618033, which prescribes Waste Discharge Requirements for Urban Runoff (as defined in Appendix 4) from the cities and the unincorporated areas in Riverside County within the jurisdiction of the Santa Ana Regional Board Water Quality Control Board (Regional Board). This Order regulates discharges of Urban Runoff from the Permit Area, as defined in Order No. R8-2009-0033 and shown in Appendix 1.

Urban Runoff includes those discharges from residential, commercial, industrial, and construction areas within the Permit Area and excludes discharges from feedlots, dairies, farms, and open space. Urban Runoff discharges consist of storm water and authorized non-storm water surface runoff from drainage sub-areas with various, often mixed, land uses within all the hydrologic drainage areas that discharge into the Waters of the U. S.

If appropriate pollution control measures are not implemented, Urban Runoff may contain pathogens (bacteria, protozoa, viruses), sediment, trash, fertilizers (nutrients, mostly nitrogen and phosphorus compounds), oxygen-demanding substances (decaying matter), pesticides (DDT, chlordane, diazinon, chlorpyrifos), heavy metals (cadmium, chromium, copper, lead, zinc), and petroleum products (oil & grease, PAHs, petroleum hydrocarbons).

If not properly managed and controlled, urbanization can change the stream hydrology and increase pollutant loading to Receiving Waters. As a watershed undergoes urbanization, pervious surface area decreases, runoff volume and velocity increases, riparian habitats and wetland habitats decrease, the frequency and severity of flooding increase, and pollutant loading increases. Most of these impacts occur due to human activities (anthropogenic) that occur during and/or after urbanization. The pollutants and hydrologic changes can cause declines in aquatic resources, cause toxicity to aquatic organisms, and impact human health and the environment. Based on information provided in Section D of the Riverside County Flood Control and Water Conservation District's (RCFC&WCD or the Principal Permittee as context indicates) Hydrology Manual, it is feasible that, in semi-arid regions, development may result in the creation of a net increase in absorption.

Properly planned high-density development can reduce urban sprawl and problems associated with sprawl. Urban in-fill and high-density development are elements of smart growth, which creates the opportunity to maintain relatively natural open space elsewhere in the Permit Area (see Appendix 4). The goal of LID is to mimic pre-development runoff quality and quantity.

On April 27, 2007, The RCFC&WCD in cooperation with the County of Riverside (the County) and the incorporated cities of Beaumont, Calimesa, Canyon Lake, Corona, Hemet, Lake Elsinore, Moreno Valley, Murrieta, Norco, Perris, Riverside, and San Jacinto (hereinafter, with the County, collectively referred to as the Co-Permittees, and collectively, with the Principal Permitee, the Permittees), jointly submitted a NPDES Application No. CAS 618033, a Report of Waste Discharge (the ROWD) and a revised Drainage Area Management Plan (DAMP) to renew the Municipal Separate Storm Sewer System (MS4) NPDES permit for the Santa Ana River watershed (the Permit Area) within Riverside County. This Order renews the NPDES permit authorizing Urban Runoff in the Permit Area (see Appendix 1, "urban area" includes those portions of "agriculture" and "open space" that convert to industrial, commercial, or residential use during the term of this Order). To more effectively carry out the requirements of this Order, the Permittees have agreed that the RCFC&WCD will continue as the Principal Permittee and the County and the incorporated cities will continue as the Co-Permittees.

On February 5, 2008 Wildomar residents voted for cityhood and the City incorporated on July 1, 2008. Menifee residents voted for cityhood on June 3, 2008 and the City incorporated on October 1, 2008. On May 6, 2009, the City of Menifee and on May 5, 2009, the City of Wildomar have submitted Letter of Intent to be a Co-Permittee in this Order and for the purposes of this Order shall be considered as such.

B. PROJECT AREA

The Permit Area contains 1,396 square miles or 19.1% of the 7,300 square miles within Riverside County and includes 15 of the 26 municipalities within Riverside County. The California Department of Finance estimates that as of January 1, 2008, the population of Riverside County is 2,088,322 of which 1,237,388[1] reside within the Permit Area. Calimesa and Canyon Lake have populations of 25,000 or less. The County, Corona, Moreno Valley and Riverside have populations of 100,000 or more. The Southern California Association of Governments estimates that the County of Riverside will grow by 16% between 2006 and 2010 (2008 RTP Growth Forecast by City). The most significant percentage growth in population between 2006 and 2010 is expected in the Cities of Beaumont, Calimesa, and San Jacinto.

Land uses in Riverside County within the Santa Ana River Region include open space, residential, commercial, light industrial, heavy industrial, and agriculture. The agricultural land uses include row crops, nurseries, citrus groves and vineyards, dairies, ranches, poultry and hog farms, and other agricultural related uses with one single-family residence allowed per 10 acres (County of Riverside General Plan, Land Use Element 2003). The conversion of agricultural lands and open space to other “developed” land uses has been ongoing and will continue. Based on Riverside County Assessor’s Parcel Data as of February 2006, the land use mix was: 29,441 acres used or zoned for commercial/industrial purposes (4%), 140,663 acres for residential purposes (16%), 11,798 acres utilized for improved roadways (1%), 463,848 acres are vacant or utilized for open space (52%), and 48,627 acres are used for agricultural purposes (5%). The federal government owns 199,064 acres (22%) of the territory within the area shown on Appendix 1.

Less than one fifth (1/5) of the entire acreage within Riverside County drains into water bodies within the Permit Area. The Permit Area includes the "urban area" as shown in Appendix 1 and those portions of "agriculture" and "open space" as shown on Appendix 1 that do convert to industrial, commercial or residential use during the term of this Order. The Permit Area is delineated by the San Bernardino-Riverside County boundary line on the north and northwest, the Orange Riverside County boundary line on the west, the Santa Ana-San Diego Regional Board boundary line on the south, and the Santa Ana Colorado River Basin Regional Board boundary line on the east. Sixty-seven percent of Riverside County’s population resides within the Regional Board's jurisdiction. The San Diego and the Colorado River Basin Regional Water Quality Control Boards regulate Urban Runoff from those portions of Riverside County outside of the Permit Area shown in Appendix 1.

[1] As per 2006 ROWD, excluding the cities of Menifee and Wildomar

C. CLEAN WATER ACT REQUIREMENTS

The federal Clean Water Act (the "CWA") established a national policy designed to help maintain and restore the physical, chemical and biological integrity of the nation's waters. In 1972, the CWA established the NPDES permit program to regulate the discharge of pollutants from point sources to waters of the nation (the "waters of the U. S."). From 1972 to 1987, the main focus of the NPDES program was to regulate conventional pollutant sources such as sewage treatment plants and industrial facilities. As a result, on a nationwide basis, non-point sources, including agricultural runoff and Urban Runoff, now contribute a larger portion of many kinds of pollutants than the more thoroughly regulated sewage treatment plants and industrial facilities.

The National Urban Runoff Program (NURP) final report to the Congress (USEPA, 1983) concluded that the goals of the CWA could not be achieved without addressing Urban Runoff discharges. The 1987 CWA amendments established a framework for regulating Urban Runoff. Pursuant to these amendments, the Santa Ana Regional Board began regulating municipal storm water runoff in 1990.

II. REGULATORY BACKGROUND AND CLEAN WATER ACT REQUIREMENTS

As water flows over streets, parking lots, construction sites, and industrial, commercial, residential, and municipal areas, it can intercept pollutants from these areas and transport them to Waters of the U.S. As indicated in I. A, above, Urban Runoff may contain pathogens, sediment, trash, fertilizers, oxygen-demanding substances, pesticides, heavy metals, and petroleum products. If not properly managed and controlled, urbanization may adversely impact water quality and quantity in the receiving waters.

However, urban development projects that incorporate LID concepts could minimize the impact of urban development on runoff water quality and quantity.

Studies [2] conducted in the Southern California area have established storm water runoff from urban areas as significant sources of pollutants in surface waters. The Santa Ana River is impacted by agricultural, other discharges and Urban Runoff as it flows through the San Bernardino County and Riverside County areas prior to flowing through Orange County and into the Pacific Ocean. .

If not properly controlled, Urban Runoff could be a significant source of pollutants in the Waters of the U. S. Table 1 includes a list of pollutants, their sources, and some of the adverse environmental consequences mostly resulting from urbanization.

[2] Bay, S., Jones, B. H. and Schiff, K, 1999, Study of the Impact of Stormwater Discharge on Santa Monica Bay. Sea Grant Program, University of Southern California; and Haile, R.W., et al., 1996, An Epidemiological Study of Possible Adverse Health Effects of Swimming in Santa Monica Bay. Southern California Coastal Water Research Project (1992), Surface Runoff to the Southern California Bight.

Table 1[3]
Pollutant Sources and Impacts of a Number of Pollutants
On Waters of the U.S.

Pollutants	Sources	Effects and Trends
Toxins (e.g., biocides, PCBs, trace metals, heavy metals)	Industrial and municipal wastewater; runoff from farms, forests, urban areas, and landfills; erosion of contaminated soils and sediments; vessels; atmospheric deposition	Poison and cause disease and reproductive failure; fat-soluble toxins may bioconcentrate, particularly in birds and mammals, and pose human health risks. Inputs into Waters of the U.S. have declined, but remaining inputs and contaminated sediments in urban and industrial areas pose threats to living resources.
Pesticides (DDT, diazinon, chlorpyrifos)	Urban Runoff, agricultural runoff, commercial, industrial, residential and farm use	The use of legacy pesticides (DDT, chlordane, dieldrin) has been banned or restricted; still persists in the environment; some of the other pesticide uses are curtailed or restricted.
Biostimulants (organic wastes, plant nutrients)	Sewage and industrial wastes; runoff from farms and urban areas; nitrogen from combustion of fossil fuels	Organic wastes overload bottom habitats and deplete oxygen; nutrient inputs stimulate algal blooms (some harmful), which reduce water clarity, and alter food chains supporting fisheries. While organic waste loading has decreased, nutrient loading has increased (NRC, 1993a, 2000a).
Petroleum products (oil, grease, petroleum hydrocarbons, PAHs)	Urban Runoff and atmospheric deposition from land activities; accidental spills; oil & gas production activities; natural seepage; and PAHs from internal combustion engines	Petroleum hydrocarbons can affect bottom organisms and larvae; spills affect birds, mammals and aquatic life. While oil pollution from accidental spills and production activities has decreased, diffuse inputs from land-based activities have not (NRC, 1985).
Radioactive isotopes	Atmospheric fallout, industrial and military activities	Bioaccumulation may pose human health risks where contamination is heavy.
Sediments	Erosion from farming, construction activities, forestry, mining, development; river diversions; coastal dredging and mining	Reduce water clarity and change bottom habitats; carry toxins and nutrients; clog fish gills and interfere with respiration in aquatic fauna. Sediment delivery by many rivers has decreased, but sedimentation poses problems in some areas.
Plastics and other debris	Ships, boats, fishing nets, containers, trash, Urban Runoff	Entangles aquatic life or is ingested; degrades, beaches, lake shores, near shore habitats, and wetland habitats. Floatables (from trash) are an aesthetic nuisance and can be a substrate for algae and insect vectors.
Thermal	Cooling water from power plants and industry, urban run off from impervious surfaces	Kills some temperature-sensitive species; and displaces others. Generally, less a risk to marine life than thought 20 years ago.
Noise	Vessel propulsion, sonar, seismic prospecting, low-frequency sound used in defense and research	May disturb marine mammals and other organisms that use sound for communication.
Pathogens (bacteria, protozoa, viruses)	Sewage, Urban Runoff, livestock, wildlife, and discharges from boats and cruise ships.	Pose health risks to swimmers and consumers of aquatic life. Sanitation has improved, but standards have been raised (NRC 1999a).
Alien species	Ships and ballast water, fishery stocking, aquarists	Displace native species, introduce new diseases; growing worldwide problem (NRC 1996).

[3] Adapted from "Marine Pollution in the United States" prepared for the Pew Oceans Commission, 2001.

The CWA prohibits the discharge of any pollutant to navigable waters from a point source unless an NPDES permit authorizes the discharge. Efforts to improve water quality under the NPDES program traditionally and primarily focused on reducing pollutants in discharges of industrial process wastewater and municipal sewage. The 1987 amendments to the CWA required MS4s and industrial facilities, including construction sites, to obtain NPDES permits for storm water runoff from their facilities. On November 16, 1990, the USEPA promulgated the final Phase I storm water regulations. The storm water regulations are contained in 40 CFR Parts 122, 123 and 124.

On July 13, 1990, the Regional Board adopted the first term Riverside County Area-wide MS4 Permit, Order No. 90-104 (NPDES No. CA 8000192), for Urban Runoff from areas in Riverside County within the Permit Area. On March 8, 1996, the Regional Board renewed Order No. 90-104 by adopting the second term area-wide MS4 permit, Order No. 96-30, (NPDES No. CAS618033). On October 25, 2002, the Regional Board renewed Order No. 96-30 by adopting the third term area-wide MS4 permit, Order No. R8-2002-0011.

This Order renews the area-wide NPDES permit for the Permit Area for the fourth-term, in accordance with Section 402 (p) of the CWA and all requirements applicable to an NPDES permit issued under the issuing authority's discretionary authority. The requirements included in this Order are consistent with the CWA, the federal regulations governing urban storm water discharges, the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan), the California Water Code, and the State Water Resources Control Board's (State Board) Plans and Policies.

The Basin Plan is the basis for the Regional Board's regulatory programs. The Basin Plan was developed and is periodically reviewed and updated in accordance with relevant federal and state law and regulation, including the CWA and the California Water Code. As required, the Basin Plan designates the Beneficial Uses of the waters of the Region and specifies water quality objectives intended to protect those uses. (Beneficial Uses and water quality objectives, together with an anti-degradation policy, comprise federal "water quality standards"). The Basin Plan also specifies an implementation plan, which includes certain discharge prohibitions. In general, the Basin Plan makes no distinctions between wet and dry weather conditions in designating Beneficial Uses and setting water quality objectives, i.e., the Beneficial Uses, and correspondingly, the water quality objectives are assumed to apply year-round. (Note: In some cases, beneficial uses for certain surface waters are designated as "I", or intermittent, in recognition of the fact that surface flows (and Beneficial Uses) may be present only during wet weather.) Most Beneficial Uses and water quality objectives were established in the 1971, 1975, 1983, and 1995 Basin Plans. The 1995 Basin Plan was updated in February 2008[4]. Amendments to the Basin Plan included new nitrate-nitrogen and TDS objectives for specified management zones,

[4] http://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/index.shtml

new nitrogen and TDS management strategies applicable to both surface and ground waters and various Total Maximum Daily Loads (TMDLs) and Implementation Plans that had been adopted for impaired water bodies within the region.

Water Code Section 13241 requires that certain factors be considered, at a minimum, when water quality objectives are established. These include economics and the need for developing housing in the Region. During the third term permit development process, the Permittees raised an issue regarding compliance with Section 13241 of the California Water Code with respect to water quality objectives for wet weather conditions, specifically the cost of achieving compliance during wet weather conditions and the need for developing housing within the Region and its impact on Urban Runoff. During the 2006 review of the Basin Plan, this matter was incorporated on the triennial review list. To begin addressing this issue, Regional Board staff, in collaboration with the MS4 Permittees in the Santa Ana River watershed, has organized a Storm Water Quality Standards Task Force (SWQSTF).

The SWQSTF is closely analyzing, monitoring and documenting actual and potential Beneficial Uses of surface waters within the Santa Ana River watershed. Based on the findings, the SWQSTF plans to recommend changes to the current Beneficial Use designations and water quality objectives specified in the Basin Plan. This Order may be reopened to incorporate any changes to the water quality standards. The SWQSTF is currently focusing on Recreational Beneficial Uses. In the meantime, the provisions of this Order will result in reasonable further progress towards the attainment of the existing water quality objectives, in accordance with the discretion in the permitting authority recognized by the United States Court of Appeals for the Ninth Circuit in Defenders of Wildlife vs. Browner, 191 F.3d 1159, 1164 (9th Cir. 1999).

III. EXCLUSIONS TO THE PERMIT AREA

Areas of the County not addressed or which are excluded by the storm water regulations and areas not under the jurisdiction of the Permittees are excluded from the area requested for coverage under this permit application. These include the following areas and activities:

- Federal lands and State properties, including, but not limited to, military bases, national forests, hospitals, colleges and universities, and highways;
- Native American tribal lands;
- Open space and rural (non-urbanized) areas;
- Agricultural lands (exempted under the CWA); and

- Utilities, railroads, and special districts (including school districts, park districts, publicly owned treatment works and water utilities, etc..).

These areas in the Permit Area for which coverage under a NPDES MS4 permit is excluded, are shown in Appendix 1.

IV. BENEFICIAL USES

Storm water flows discharged to MS4s in the Permit Area are tributary to various water bodies (inland surface streams, lakes and reservoirs) of the State. The Beneficial Uses of these water bodies may include municipal and domestic supply, agricultural supply, industrial service and process supply, groundwater recharge, water contact recreation, non-contact water recreation, and sport fishing, warm freshwater habitat, cold freshwater habitat, preservation of biological habitats of special significance, wildlife habitat and preservation of rare, threatened or endangered species. The ultimate goal of this Order is to protect the Beneficial Uses and quality of the Receiving Waters.

To protect the Beneficial Uses of the Receiving Waters, the pollutants from all sources, including Urban Runoff, need to be controlled. Recognizing this, and the fact that Urban Runoff contains pollutants, an area-wide MS4 permit is the most effective way to develop and implement a comprehensive Urban Runoff management program in a timely manner. This area-wide MS4 permit contains requirements with time schedules that will allow the Permittees to continue to address water quality problems caused by Urban Runoff through their management programs to reduce pollutants in Urban Runoff discharges consistent with the MEP standard [See Appendix 4, Glossary].

V. WATERSHED MANAGEMENT IN THE UPPER SANTA ANA RIVER BASIN

A. Management Approach

To regulate and control Urban Runoff from the Permit Area to the MS4s, an area-wide approach is essential and a holistic approach is needed to efficiently manage the water quality of the Region. The entire MS4 is not controlled by a single entity; the RCFC&WCD, the County, several cities, the State Department of Transportation (Caltrans), and the U.S. Army Corps of Engineers, in addition to other smaller entities, manage the MS4s. In addition to the cities, the County and the RCFC&WCD, there are a number of other significant contributors of Urban Runoff to these MS4s. These include: large institutions such as the State university system, prisons, schools, hospitals, etc.; federal facilities such as military sites, etc.; State agencies, such as Caltrans; water and wastewater management agencies such as Eastern and Western Municipal Water District; the National Forest Service and State parks. The State Board has issued a separate NPDES permit to

Caltrans. In addition, Caltrans, and the other contributors identified, are not under the jurisdiction of the Permittees. The management and control of the entire MS4 cannot be effectively carried out without the cooperation and efforts of all these entities. Also, it would not be meaningful to issue a separate MS4 permit to each of the entities within the Permit Area whose land/facilities drain into the MS4s operated by the Permittees and ultimately to Waters of the U.S. The Regional Board has concluded that the best management option for the Permit Area is to issue an area-wide NPDES MS4 permit to the Permittees.

Although, the Urban Runoff from the Permit Area drains into Orange County, Urban Runoff from Orange County areas are regulated under NPDES No. CAS 618030. Some areas within Riverside County are within the Colorado River Basin and San Diego Regional Boards' jurisdictions. Permit requirements for Urban Runoff from the drainage areas of Riverside County within the jurisdiction of the San Diego and Colorado River Basin Regional Boards are addressed by those Regional Boards.

In developing Urban Runoff management and monitoring programs, consultation/coordination with other drainage management entities and other Regional Boards is essential. Common programs, reports, implementation schedules and efforts are desirable and will be utilized to the MEP.

Cooperation and coordination among all the stakeholders are essential for efficient and economical management of the watershed. It is also critical to manage non-point sources at a level consistent with the management of Urban Runoff in a watershed in order to successfully prevent or remedy water quality impairment. Regional Board staff will facilitate coordination of monitoring and management programs among the various stakeholders.

An integrated watershed management approach for Urban Runoff is consistent with the Strategic Plan (2008-2012[5]) and Initiatives for the State and Regional Boards and the draft California Water Plan Update[6] . A watershed wide approach is also necessary for implementation of the load and WLAs developed under the TMDL process. The Permittees and all the affected entities are encouraged to participate in regional or watershed solutions, instead of project-specific and fragmented solutions.

The pollutants in Urban Runoff originate from a multitude of sources and effective control of these pollutants requires a cooperative effort of all the stakeholders and many regulatory agencies. Every stage of urbanization should be considered in developing appropriate Urban Runoff pollution control methodologies. The program's success depends upon consideration of pollution control techniques during planning, construction and post-construction operations. At each stage, appropriate pollution prevention measures, proper site design considerations,

[5] State Water Resources Control Board, Strategic Plan Update, 2008-2012, September 2, 2008
[6] http://www.waterplan.water.ca.gov/docs/cwpu2009/1208prd/vol2/UrbanRunoff_PRD_09.pdf

source control measures, and, if necessary, treatment techniques should be considered.

B. SUB-WATERSHEDS AND MAJOR CHALLENGES

The Santa Ana River watershed is the major watershed within the Santa Ana Region. This watershed is divided into three sub-watersheds: the Lower Santa Ana, Upper Santa Ana, and San Jacinto.

1. The lower Santa Ana River sub-watershed (downstream from Prado Basin) includes the north half of Orange County. The Upper Santa Ana River sub-watershed includes the southwestern corner of San Bernardino County and the northwestern corner of Riverside County. The San Jacinto sub-watershed includes the northwest corner of Riverside County south of the Upper Santa Ana River sub-watershed within the Santa Ana Region.

   Generally, the San Bernardino County drainage areas drain to the Riverside County drainage areas, and Riverside County drainage areas discharge to Orange County through Prado Dam on the Santa Ana River. Most of the flow in the Santa Ana River is recharged into the ground water in Orange County but infrequently some of the flow may be discharged to the Pacific Ocean as a result of heavy storm events.

   Water from rainfall and snow melt runoff, and surfacing ground water from various areas either discharge directly to the Santa Ana River or to watercourses tributary to the Santa Ana River. Other major rivers in the Permit Area include the San Jacinto River and Temescal Creek. The San Jacinto Mountain areas drain into the San Jacinto River, which discharges into Canyon Lake and then to Lake Elsinore. The San Jacinto River is ephemeral. Smaller storms tend to be fully captured by Canyon Lake, which the San Jacinto River drains into, with discharges from Canyon Lake to Lake Elsinore only occurring in larger events or wetter years. Any overflow from Lake Elsinore is tributary to Temescal Creek, which flows into the Santa Ana River at the Prado Flood Control Basin. Overflow from Lake Elsinore occurs infrequently, only once every 12 to 15 years.

2. Upper Santa Ana River Sub-watershed:

   a. Reach 3 of the Santa Ana River (Prado Dam to Mission Boulevard in Riverside): The Pollutant of Concern for Reach 3 based on adopted TMDLs and the 2006 303(d) list is pathogens. With the adoption of the TMDL for bacterial indicators, the Basin Plan now contains schedules for achieving compliance with waste load allocations (WLAs) for bacterial indicators in the Middle Santa Ana River watershed.

b. Reach 4 of the Santa Ana River: Reach 4 of the Santa Ana River is the portion of the River from Mission Boulevard Bridge in Riverside to the San Jacinto fault (Bunker Hill Dike) in San Bernardino. Reach 4 is also listed in the CWA Section 303(d) as an Impaired Waterbody. Most of Reach 4 of the River is in San Bernardino County. The Pollutant of Concern for Reach 4 is pathogens, scheduled for TMDL completion in 2019.

c. San Jacinto Sub-watershed: Canyon Lake and Lake Elsinore are in this watershed and are listed on the 2006 303(d) list for pathogens (Canyon Lake) and PCBs and unknown toxicity (Lake Elsinore). Nutrient TMDLs have been developed for both Canyon Lake and Lake Elsinore. The Basin Plan contains schedules for achieving compliance with WLAs for nutrients in the San Jacinto watershed (Canyon Lake/Lake Elsinore).

C. CWA SECTION 303(d) LIST AND TMDLS:

Pursuant to Section 303(b) of the CWA, the 2006 water quality assessment conducted by the Regional Board listed a number of water bodies within the Region under Section 303(d) of the CWA as Impaired Waterbodies. These are water bodies where the designated Beneficial Uses are not met and the water quality objectives are being violated. The sources of the impairments include POTW discharges, and runoff from agricultural, open space and urban land uses. The Impaired Waterbodies in Riverside County within the Santa Ana Regional Board's jurisdiction are listed in Table 2. In addition, CWA Section 303(d) requires States to develop and submit to USEPA for approval a list of waterbodies that are not meeting water quality standards (WQS) and are not expected to attain these standards even with technology based controls. CWA Section 305(b) requires States to biennially prepare and submit to the USEPA for approval a report assessing statewide surface water quality.

Staff of the Santa Ana Regional Board has reviewed and reevaluated all water quality monitoring and information, combined the CWA Section 305(b) Report with the Section 303(d) List of Impaired Waters and introduced the Proposed 2008 303(d)-305(b) Integrated Report, that was adopted on April 24, 2009, by the Regional Board. The additional impaired waters that are on this list are also included in Table 2. The Proposed 2008 303(d)-305(b) Integrated Report has not been approved by the State Board or the USEPA.

Federal regulations require that a TMDL be established for each 303(d) listed waterbody for each of the pollutants causing impairment. The TMDL is the total amount of the problem pollutant that can be discharged while water quality standards in the receiving water are attained, i.e., water quality objectives are met and the Beneficial Uses are protected. It is the sum of the individual WLAs for point source inputs, LAs for non-point source inputs and natural background,

with a margin of safety. The TMDLs are the basis for limitations established in Waste Discharge Requirements. TMDLs are being developed for all pollutants identified in Table 2. The Permittees shall revise their DAMP, at the direction of the Executive Officer, to incorporate TMDL program implementation plans developed and approved pursuant to the process for the designation and implementation of TMDLs for Impaired Waterbodies.

For 303(d) listed waterbodies without a TMDL, the Permittees are required to provide special protections through development and implementation of focused control measures that would address the Pollutants of Concern. If a TMDL has been developed and an implementation plan is yet to be developed, the Permittees are required to develop constituent specific source control measures, conduct additional monitoring and/or cooperate with the development of an implementation plan.

Table 2

2006 CWA Section 303(d) Listed Waterbodies and April 24, 2009 Proposed 2008 Integrated Report of 305(b) and 303(d) List of Water Quality Limited Segments

WATER BODY	HYDRO UNIT	POLLUTANT/ STRESSOR	SOURCE	SIZE AFFECTED
Canyon Lake	802.120	Pathogens	Nonpoint Source	453 Acres
Lake Elsinore	802.310	Unknown Toxicity	Unknown Nonpoint Source	2431 Acres
		PCB's.	Unknown Nonpoint Source	2431 Acres
		Proposed for 2008 Sediment Toxicity	Unknown Point and/or Nonpoint Sources	2431 Acres
Lake Fulmor	802.210	Pathogens	Unknown Nonpoint Source	4.2 Acres
Santa Ana River, Reach 3	801.200	Pathogens	Unknownn Nonpoint Source	3 miles
		Proposed for 2008 Copper – Wet Season	Unknown Nonpoint Source	3 Miles
Temescal Creek Reach 1		Proposed for 2008 pH	Unknown	Unknown

VI. FIRST, SECOND, AND THIRD TERM PERMITS

A. STORM WATER POLLUTION CONTROL PROGRAMS AND POLICIES

1. Prior to USEPA's promulgation of the final regulations implementing the storm water requirements of the 1987 CWA amendments, the counties of Orange, Riverside and San Bernardino requested an area-wide NPDES permit for storm water runoff for each of the county areas within the Santa Ana Regional Board's jurisdiction. On July 13, 1990, the Regional Board issued Order No. 90-104 to the Permittees (first term permit). In 1996, the Regional Board adopted Order No. 96-30 for the Riverside County Permit Area (second term permit). On October 24, 2002, the Regional Board adopted Order No. R8-2002-0011 for the Riverside County Permit Area (third term permit). These permits included the following requirements:

   a. Prohibited non-storm water discharges to the MS4s with certain exceptions.
   b. Required the Permittees to develop and implement a DAMP to reduce pollutants in Urban Runoff to the MEP.
   c. Required the discharges from the MS4 to meet water quality standards in Receiving Waters.
   d. Required the Permittees to identify and eliminate illicit connections and illegal discharges to the MS4.
   e. Required the Permittees to establish legal authority to enforce Storm Water Ordinances.
   f. Required monitoring of dry weather flows, storm flows, and Receiving Water quality, and program assessment.
   g. Required the Permittees to inventory, prioritize and inspect construction sites and industrial and commercial facilities based on threat to water quality.
   h. Required the Permittees to develop a restaurant inspection program to address practices that may impact Urban Runoff quality such as oil and grease disposal, trash bin area management, parking lot cleaning, spill clean-up, and inspection of grease traps or interceptors to ensure adequate capacity and proper maintenance.
   i. Required the Permittees to review and approve Water Quality Management Plans (WQMPs) for categories of New Development and Significant Redevelopment projects to address post-development runoff water quality and hydromodification.

j. Required the Permittees to develop a unified response plan to respond to sewage spills that may impact Receiving Water quality.

During the first term permit, the Permittees developed a DAMP that was approved by the Executive Officer on January 18, 1994. The DAMP included five BMP groups: environmental education activities, solid waste activities, road drainage system operations and maintenance, regulatory and enforcement activities, and structural controls. The DAMP was updated as part of the second and third-term Permits. The Permittees submitted a revised DAMP with the fourth term permit renewal application (ROWD).

2. The RCFC&WCD performs water quality monitoring activities in support of three separate area-wide NPDES MS4 Permits (Santa Ana, San Diego and Colorado River Basin) under the Consolidated Monitoring Program (CMP). Water samples and/or sediment samples have been collected at a total of 74 locations over the last fifteen years. These 74 locations are comprised of 45 storm drain outfalls, 12 receiving water, 15 sediment, and 2 special interest sampling locations. In addition, the Permittees participate in a number of sub-regional and regional monitoring programs and special studies.

3. During the third term permit, the Executive Officer approved the delay in implementing the bioassessment requirement to allow the development of indices of biological integrity applicable to inland waters. Subsequently, a regional bioassessment monitoring was initiated by the Surface Water Ambient Monitoring Program (SWAMP) to determine the conditions of the receiving waters in a more holistic way. The Southern California Watershed Research Project (SCCWRP), in conjunction with the southern California MS4 Permit programs, has developed a regional bioassessment monitoring program in which the Permittees participating. This Order requires the Permittees to continue to participate in the regional bioassessment monitoring program. It is expected that these monitoring stations and Permittee and regional monitoring will be used to identify problem areas and to re-evaluate the monitoring program and the effectiveness of BMPs. The future direction of some of these program elements will depend upon the results of the ongoing studies and a holistic approach to watershed management.

4. Other elements of the Urban Runoff management program included identification and elimination of illegal discharges, illicit connections, and establishment of adequate legal authority to control pollutants in Urban Runoff discharges. The Permittees have completed a survey of their MS4 to identify illegal/illicit connections and have adopted appropriate ordinances to establish legal authority. Some of the more specific achievements during the second and third term permits are as follows:

a. During the second term permit, the Permittees operated under an Implementation Agreement that sets forth the responsibilities of the Permittees as defined in the 1996 Permit. The Permittees update this agreement during each MS4 Permit term. The Permittees have adopted Storm Water Ordinances regarding the management of Urban Runoff. The Storm Water Ordinances provide the Permittees with the legal authority to implement the requirements of the MS4 Permit and the key regulatory requirements contained in 40 CFR Section 122.26(d)(2)(I)(A-F).
b. Revised DAMP: Includes 28 Construction Site and 36 Municipal and Industrial Source Control BMPs that are to be implemented by the Permittees for purposes of controlling pollutants associated with Urban Runoff to the MEP. The Permittees also strengthened enforcement and compliance elements of the DAMP. Enhanced the construction site inspections, the industrial/commercial facilities inspections, new development review requirements, and the Permittee facilities and activities program.
c. Cooperated in the establishment of TMDL Task Forces and workgroups for Lake Elsinore, Canyon Lake and the Middle Santa Ana River.
d. Assisted in development and implementation of the TMDLs for Canyon Lake, Lake Elsinore and the Middle Santa Ana River.
e. Developed and updated methods to track program effectiveness such as resident surveys, tracking hotline inquiries, and web counters.
f. In August 1999 the RCFC&WCD and the County's Environmental Health Department executed an agreement that provides the framework for an area-wide Commercial and Industrial Compliance Assistance Program (CAP).
g. The Permittees have participated in the CMP.
h. The Permittees administered area-wide programs including: hazardous materials emergency response, household hazardous waste collection, industrial/commercial compliance assistance program and public education and outreach. Some of these programs were coordinated with Caltrans and local agencies.
i. A Municipal Facilities Strategy was established then later incorporated into the DAMP, the Supplement "A" New Development Guidelines were amended to require compliance with the Riverside County WQMP for specific categories of New Development and Significant Redevelopment projects.
j. The Riverside County WQMP was developed in 2004. The Model WQMP is a post-construction planning tool to address Urban Runoff from New Development and Significant Redevelopment. The WQMP is implemented on a watershed-specific level, and provides guidance for project specific post-construction BMPs to address the quantity and quality of Urban Runoff from new development and significant redevelopment projects. Any New Development or Significant Redevelopment project that requires discretionary approval must submit a project-specific WQMP to the

appropriate Permittee. The project-specific WQMP ensures that management of Urban Runoff to protect Receiving Water quality is considered a priority during project design and operation.

k. Established the Management Steering Committee that brings together the city managers in the Permit Area promoting consensus and communication on a regional basis.
l. Formation of sub-committees to guide and develop specific program elements (Construction Activities, Industrial/Commercial Activities, New Development/ Significant Redevelopment, Public Education, Permittee Facilities & Activities, Monitoring, & Finance).
m. Evaluated and revised ordinances, regulations, rules, and codes to ensure appropriate level of legal authority.
n. A Technical Advisory Committee for overall program development and implementation was established.
o. Program Review: A number of existing programs were reviewed to determine their effectiveness in combating Urban Runoff pollution and to recommend alternatives and or improvements, including public agency activities and facilities, illegal discharges and illicit connections to the MS4 systems, and existing monitoring programs.
p. Enhanced Public Education program through development of new outreach materials and programs.
q. Public Education: A number of steps were taken to educate the public, businesses, industries, and commercial establishments regarding their role in Urban Runoff pollution controls. The industrial dischargers were notified of the Urban Runoff regulatory requirements. For a number of unregulated activities, BMP guidance documents were developed and a toll free hotline was established for reporting any suspected water quality problems.
r. The Storm Water Protection website was developed and is continually enhanced. It contains resources for residential facilities, businesses, developers and contractors. The website is accessible from the RCFC&WCD home page. The Storm Water Protection website offers free brochures that all web site visitors can print in quantities or can order including:
    i. *After the Storm* – a citizen's guide to understanding MS4 pollution in your neighborhood or when performing daily activities.
    ii. *Automotive Maintenance & Car Care* – guidelines for keeping your auto shop or retail fuel facility in environmental shape.
    iii. *Outdoor Cleaning Activities* – guideline for outdoor cleaning activities and wastewater disposal.
    iv. *Pools, Spas and Fountains* –Environmental maintenance suggestions for pool, spa, and fountain owners.
    v. *What's the Scoop* – tips for a healthy pet and a healthier environment.
    vi. *Household Hazardous Waste (HHW)* – A schedule of collection locations for proper disposal of HHW.

vii. *Storm Water Pollution Found in Your Neighborhood* – door hanger.

s. In addition to the information provided on the Storm Water Protection website, the Public Education and Outreach Program has:
   i. Tested and/or implemented several new Public Education and Outreach Program effectiveness tracking mechanisms including call tracking, web counters, testing, and surveys.
   ii. Conducted a review of the efficacy of Permittee employee training programs.
   iii. Enhanced the toll free storm water pollution reporting hot line to include public education information and support for the Public and other interested stakeholders.
   iv. Enhanced on-line registration access for NPDES training to help facilitate training of appropriate Permittee employees.
   v. Worked with the Riverside-Corona Resource Conservation District to develop home garden workshops and presentations to elementary and middle schools and staff to raise public awareness of Urban Runoff management issues and source control methods and to encourage volunteers, partners, and groups to gather annually for a trash and debris clean-up day along the Santa Ana River.
   vi. Developed special newspaper and billing inserts, fliers and advertisements to raise public awareness of Urban Runoff management issues and source control methods. A radio advertising campaign was also developed and implemented for a limited time.
   vii. Developed and presented workshops regarding household hazardous waste use and proper disposal at major home improvement stores through out Riverside County.
   viii. Placed numerous advertisements in the Penny Saver and Bargain Bulletin to raise public awareness of Urban Runoff management.
   ix. In cooperation with certain County Service Areas and other programs, pet waste signs with bag dispensers have been installed at various parks to help encourage the proper disposal of animal waste.
   x. Coordinated with County-wide Animal Control Facilities, as well as city-owned animal control facilities and Humane Societies, to distribute specific materials to the County Agricultural inspectors as well as Regional Board inspectors for use during facility inspections.
   xi. Distributed educational and outreach materials to the County Agricultural inspectors as well as Santa Ana Regional Board staff inspectors for use during facility inspections.
   xii. Cooperated with the Western Riverside Council of Government (WRCOG) in the Used Oil Block Cycle Grant that decreases the amount of illegally dumped motor oil by promoting the addition of new Certified Oil Collection Centers.

xiii. Participated in WRCOG's "Cleanest County in the West" program to address issues relating to litter and illegal dumping which targeted both students and adults.

xiv. Supplemental Environmental Projects: As a result of an environmental enforcement case settlement brought by the County Department of Environmental Health, Conoco Phillips and Downs Energy developed two posters and a billboard, respectively. These items were designed to increase the awareness of appropriate BMPs for retail fuel businesses.

t. Permittee Training: Training was provided to Permittee employees to implement New Development Guidelines and Public Works BMPs. The fourth-term permit specifies additional training requirements to focus on necessary competencies for storm water program managers, Permittee planners and inspection staff. This was added following information collected during Regional Board staff audits of Permittees' storm water management programs, which found that a number of the Permittees' staff and/or contractors were not adequately trained to properly implement the required program elements contained within the third term permit and/or training programs were not properly documented.

u. Related Activities: Modified MS4s by channel stabilization and creation of sediment basins; eliminated or permitted and documented illicit connections to the MS4s.

v. Pursued and received Proposition 50 Planning Grant to develop an Integrated Regional Watershed Management Plan for the San Jacinto watershed and to facilitate implementation of the Canyon Lake/Lake Elsinore Nutrient TMDL.

w. Pursued and received two Proposition 40 Integrated Regional Watershed Management Plan implementation grants to facilitate the Middle Santa Ana River Pathogen TMDL and Lake Elsinore and Canyon Lake Nutrient TMDLs.

x. Co-Permittees developed and maintain an inventory database (or databases) of construction sites 1-acre or larger for which they have issued a building or grading permit. For each construction site/project included in a Co-Permittee's inventory, the Co-Permittees have assigned a priority of "high," "medium," or "low" to reflect the construction site's potential for impairing receiving water quality.

y. Created databases for the commercial and industrial facilities within each jurisdiction.

z. Developed a GIS Web Browser to assist developers and Permittees in identifying pertinent water quality information for proposed development projects.

aa. Developed Planning Application forms for Permittee use to ensure that the need for a project-specific WQMP was properly identified early in the planning process.

bb. Developed a FAQ and watershed impairments maps to assist Permittees and developers with preparing and reviewing project-specific WQMPs.
cc. Enhanced online watershed maps to assist developers and the public with identifying areas tributary to impaired water bodies.
dd. Developed a BMP design handbook to standardize BMP selection and design in Riverside County.
ee. Initiated development of an enhanced BMP Design Handbook to provide additional guidance for LID and post-construction BMP design.
ff. Participation in the Storm Water Monitoring Coalition efforts to evaluate LID options and establish a guidance for BMP implementation for Southern California areas.
gg. Participation in Southern California Coastal Water Research Project's hydromodification studies to develop scientifically based design guidance for Southern California.
hh. Initiated cooperative program with Environmental Health to promote Environmental Enhancement Projects in lieu of fines for violations of environmental laws. This initiative resulted in the billboard advertising campaign to promote appropriate BMPs for gas stations and garages.
ii. Prepared a one-year evaluation of Litter Management BMPs. This evaluation assessed the relative efficiency and cost effectiveness of anthropogenic litter management BMPs including: street sweeping, catch basin cleaning, deployment of trash receptacles, public education, and MS4 maintenance. As a result, a Litter Removal Inspection Form was developed that assists the Permittees in identifying and prioritizing areas with litter problems. The Permittees augmented the litter management programs including employee/contractor training, industrial/commercial activity inspections, recycling programs including bulk-item collection, participation in watershed clean-up efforts, and illegal dumping retrieval.
jj. The RCFC&WCD coordinated GIS-based maps for Permittee MS4 facilities. The MS4 maps are updated annually with new information provided by the Permittees as part of the annual reporting process. The GIS layers are also now available on the RCFC&WCD's website through an internet GIS browser.
kk. Updated Model Facilities Pollution Prevention Plan for Permittee facilities not requiring coverage under the General Permit for Storm Water Discharges Associated with Industrial Activities (General Industrial Permit).
ll. The Permittees completed a MS4 assessment in 2004 to identify opportunities for incorporation of regional BMP retrofits within the limits of existing infrastructure.
mm. Pursued a Proposition 13 Grant, through the Santa Ana Watershed Project Authority, to develop a LID BMP Demonstration and Testing Facility. RCFC&WCD has continued to develop this project and plans to start construction this winter despite the current freeze on new grant projects.

B. PRIOR TERM PERMITS - WATER QUALITY IMPROVEMENTS

An accurate and quantifiable measurement of the impact of the above stated Urban Runoff management programs is difficult, due to a variety of reasons, such as the variability in chemical water quality data, the incremental nature of BMP implementation, lack of baseline monitoring data, and the existence of some of the programs and policies prior to initiation of formal Urban Runoff management programs. There are generally two accepted methodologies for assessing water quality improvements: (1) conventional monitoring such as chemical-specific water quality monitoring; and (2) non-conventional monitoring, such as monitoring of the amount of household hazardous waste collected and disposed off at appropriate disposal sites, the amount of used oil collected, and the amount of anthropogenic debris removed from the MS4, etc.

The Permittees' water quality monitoring data submitted to date document a number of violations of Basin Plan water quality objectives for various Urban Runoff-related pollutants; the most notable among these violations was fecal coliform bacteria. Where these violations have resulted in the development of TMDLs for the Middle Santa Ana River, this Order requires the Permittees named in the TMDL: to comply with the WLAs for bacteria consistent with the Implementation Plan requirements defined in the Middle Santa Ana River TMDL.

During the prior MS4 Permit terms, there was an increased focus on watershed management initiatives and coordination among the MS4 permittees in Orange, Riverside and San Bernardino Counties. These efforts resulted in a number of regional monitoring programs and other coordinated program and policy developments. The Principal Permittee continues to be an active participant in the Storm Water Quality Standards Task Force (SWQSTF), the Canyon Lake/Lake Elsinore nutrient TMDL, the Middle Santa Ana River (MSAR) Bacterial Indicator TMDL, and the Storm Water Monitoring Coalition studies. In addition to the TMDL implementation and monitoring activities, the Permittees participate in the Regional Integrated Freshwater Bioassessment Monitoring Program, the BMP Effectiveness Project assessing the effectiveness of LID techniques. Riverside and San Bernardino MS4 Programs are also coordinating on the development of several outreach programs.

It is anticipated that with continued implementation of the revised DAMP, the programs proposed in the ROWD incorporated into this Order and other requirements specified in this Order, the goals and objectives of the storm water regulations will be met, including protection of the Beneficial Uses of all Receiving Waters.

VII. FUTURE DIRECTION/2007 ROWD

A. Recognizing the significant resources utilized in developing the 2002 MS4 Permit and the significant commitment the Permittees are making to address water quality impairments, including those identified in the 2006 303(d) List as high priority for establishment of TMDLs, the Permittees proposed in the 2007 ROWD to maintain the fundamental structure and content of the 2002 MS4 Permit and the 2005 DAMP with modifications to reflect:

1. Removed descriptions of studies that have been completed;
2. Updated references to related orders by the Santa Ana Regional Board and State Board;
3. Adoption of TMDL requirements;
4. Evolution of compliance programs;
5. Further standardization and definition of terms;
6. Consolidation of similar compliance requirements [training requirements, reporting requirements, IC/ID requirements] to simplify the Order, increase readability and prevent the need for duplicative language;
7. Deletion of requirements in the 2002 MS4 Permit that described the development of compliance program elements which were incorporated into the 2005 DAMP;
8. Development of LIPs by the Permittees during the fourth term Order;
9. Addition of Permittee coverage under the Small Linear Underground Projects (State Board Order No. 2003-0007-DWQ, NPDES No. CAS000005) and Utility Vaults (State Board Order No. 2006-0008-DWQ, NPDES No. CAG990002) General Permits;
10. Recognition that the Municipal Facilities Strategy and Enforcement Compliance Strategies have been incorporated into the DAMP; and
11. Santa Ana Regional Board staff comments received by the Permittees during the third term permit, including comments received during the January 22, 2007 ROWD kick-off meeting regarding topics such as LID, hydromodification, LIPs, etc.

B. In addition, the 2007 ROWD proposed continuing with the 2005 DAMP with some revisions. Based on an effectiveness assessment analysis, the following significant changes were incorporated into the Permittees 2007 draft DAMP compliance programs:

1. The Permittees propose to complete preparation of LIPs within 12 months of Order adoption. The Permittees propose to develop LIPs that will:

   a. Specify how each program element of the DAMP shall be implemented;

b. Describe the ordinances, plans, policies, procedures, and tools (e.g., checklists, forms, educational materials, etc.) used to execute the DAMP;

c. Identify the organizational units responsible for implementation of each program element;

d. Establish internal reporting requirements to ensure and promote accountability; and

e. Describe an adaptive method of evaluation and assessment of program effectiveness for the purpose of identifying program improvements.

2. The final report "BMP Citing Study for the Santa Ana Permit Area" was released in May 2005. The sites identified in this study are likely to be further evaluated for opportunities to implement Regional BMPs necessary to comply with existing and future TMDLs.

3. Proposed revisions to the unified IC/ID reporting procedures currently contained within the DAMP for simplicity and clarity.

C. Regional Board Approach to Consolidation of Overlapping NPDES Permit Requirements

1. During the third term permit, the Permittees reviewed the applicability of the General Permit-Small Linear Underground Projects (State Board Order No. 2003-0007-DWQ, NPDES No. CAS000005), the General Permit-De Minimus Discharges (Order No. R8-2003-0061 as amended by Order Nos. R8-2005-0041 and R8-2006-0004), and the General Permit-Utility Vaults (Order No. 2006-0008-DWQ, NPDES No. CAG990002) to their activities such as hydrant flushing, maintenance on potable water supply system(s), construction dewatering, and the short-term and intermittent discharges from the de-watering of utility vaults and underground structures. Since the DAMP incorporates BMPs for the activities covered by these general permits, the Permittees recommended separate coverage under the Small Linear Underground Projects, De Minimus Discharges, or Utility Vaults General Permits was not necessary. This Order now includes coverage for De Minimus discharges from permittee-owned facilities and activities specifically excluded from coverage under the General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (De Minimus) Threat to Water Quality, NPDES NO. CAG998001, Order No. R8-2009-0003. Permittees shall continue to obtain separate coverage for activities covered by the Small Linear Underground Projects and Utility Vaults General Permits, unless these permits are incorporated into the General Construction Permit.

2. Specific identification of the types of discharges that must have coverage under the General De Minimus Permit and the General Construction Permit, is included in Section 5 of the 2007 DAMP. This Order requires the

Permittees to include a description of those de minimus discharges into the Permittees' LIP, including a Regional Board notification process.

3. Prioritized inspections and monitoring based on sampling and monitoring results and other metrics to help target activities that present the highest risk to water quality.

D. During the fourth term Order, the following revisions to the Public Education and Outreach Program will be priorities:

1. Continue coordination of public education outreach with adjacent MS4s.
2. Continue to evaluate and enhance outreach materials for IC/IDs, nutrients, fertilizers, and pesticides.
3. Continue to focus the Public Education and Outreach Program on the pollutants causing the greatest impacts to water quality, determined by the monitoring results and the list of impaired waterbodies [303(d) list].

The Permittees have already taken several steps in this direction. For example, the Permittees have provided spray bottles with environmentally friendly pesticide recipes printed on the side to residents at community fairs; the Permittees have developed or are in the process of developing brochures for septic system management, landscape management, and gardening; the Riverside and San Bernardino County Permittees are coordinating on a Curiosity Quest Episode (KVCR Family Show) to promote BMPs for nutrients, fertilizers and pesticides and the Permittees place information in hardware and gardening stores regarding pesticide and fertilizer management.

E. As a result of continued program effectiveness assessment the Permittees propose to update annual reporting forms to incorporate specific reporting requirements for all effectiveness assessment metrics.

F. Enhanced online watershed maps to assist developers and the public with identifying areas tributary to impaired water bodies.

G. WQMP

1. The Permittees committed to maintain the "Frequently Asked Questions" information sheet for priority development projects to assist with the development and implementation of the revised WQMP.
2. The Permittees committed to update the Riverside County Storm Water Quality Best Management Practice Design Handbook to (1) better incorporate LID design concepts, (2) incorporate guidance to describe how developments can offset hydromodification impacts with LID and (3) incorporate additional design guidance to ensure maintainability and functionality of BMPs, throughout the life of the development. This Order further requires the

Permittees to revise the WQMP consistent with the requirements of the Order.

3. The Permittees committed to maintain the WQMP template to assist developers with developing a project-specific WQMP.

4. An audit of each of the Permittees' storm water management programs during the third term permit indicated no clear nexus between the watershed protection principles, including LID techniques, specified in the WQMP and the Permittees' General Plan or related documents such as Development Standards, Zoning Codes, Conditions of Approval, Project Development Guidance, etc. It appears that many of the existing procedures, Development Standards, Ordinances and Municipal Codes may be barriers to implement LID BMPs. This Order requires the Permittees to facilitate LID techniques specified in this Order.

H. The Regional Board has proposed a revised Notice of Intent and Notice of Termination for Permittee construction projects to assist Santa Ana Regional Board staff with identifying locations and owners of Permittee projects.

I. The Permittees have committed to annual updates to Sanitary Sewer Overflow Procedures to ensure proper contact information for Permittee and outside agencies.

J. WATERSHED APPROACH

1. TMDL WLAs for bacterial indicator in the Middle Santa Ana River watershed and nutrients in the Canyon Lake and Lake Elsinore are incorporated into this Order. The Permittees support TMDL implementation and agreed to participate in a comprehensive water quality monitoring program to ensure that Urban Runoff meets the water quality objectives identified in the Basin Plan and are consistent with the WLAs specified in the TMDLs. This Order requires that, consistent with the requirements of the respective TMDL Implementation Plans and this Order, the Permittees use the water quality monitoring of urban runoff to evaluate the effectiveness of the BMP and programs and demonstrate Permittees' progress towards compliance with the WLAs by the date specified in the TMDLs.

2. The USEPA has recommended a shift to watershed-based NPDES permitting[7] and watershed approach[8] to CWA programs, including NPDES programs. The Permittees and the Regional Board also recognize that a watershed-based

[7] EPA: Watershed-based NPDES permitting is a process that emphasizes addressing all stressors within a hydrologically-defined drainage basin, rather than addressing individual pollutant sources on a discharge-by-discharge basis.

[8] EPA (1996a): "The watershed approach is a coordinating framework for environmental management that focuses public and private sector efforts to address the highest priority problems within hydrologically defined geographic areas, taking into consideration both ground and surface water flow."

approach is critical in controlling pollutants in Urban Runoff. Consistent with this approach, this Order requires the Permittees to develop and implement programs that integrate hydromodification and water quality management strategies with land use planning policies, ordinances, and plans within each jurisdiction. A *watershed approach* considers the diverse pollutant sources and stressors and watershed goals within a defined geographic area (i.e., watershed boundaries). A watershed approach has three basic components:

a. *Geographic Focus*: Watersheds are nature's boundaries. They are the land areas that drain to surface waterbodies, and they generally include lakes, rivers, estuaries, wetlands, streams, and the surrounding landscape. Groundwater recharge areas are also considered.

b. *Sound Management Techniques Based on Strong Science and Data*: Sound scientific data, tools, and techniques are critical to evaluate the process. Actions taken include characterizing priority watershed problems and solutions, developing and implementing action plans, and evaluating their effectiveness within the watershed.

c. *Partnerships/Stakeholder Involvement*: Watersheds transcend political, social, and economic boundaries. Therefore, it is important to involve all the affected interests in designing and implementing goals for the watershed. Watershed teams may include representatives from all levels of government, public interest groups, industry, academic institutions, private landowners, concerned citizens, and others.

There are two major sub-watersheds in Riverside County within the Permit Area – The Middle Santa Ana River watershed, consisting of the portions of the Permit Area that drain to Reaches 3 and 4 of the Santa Ana River, and The San Jacinto River watershed, which consists of the portions of the Permit Area that drain to Lake Elsinore. The Permittees participate in the Middle Santa Ana River TMDL Task Force and the Lake Elsinore and Canyon Lake TMDL Task Forces, which are stakeholder driven, watershed based efforts to address Pollutants of Concern in the respective sub-watersheds. The Permittees have also implemented several stakeholder driven, watershed based conservation programs such as the Special Area Management Plan, the Western Riverside County Multiple Species Conservation Plan, the San Jacinto River Integrated Watershed Management Plan and the Santa Ana Watershed Project Authority One Water One Watershed Plan.

These efforts are also addressed and discussed in the DAMP, which integrates these efforts into a coherent and uniform compliance program to protect Receiving Waters. Due to economies of scale and the fact that many of the Permittees have jurisdiction in both sub-watersheds, the Permittees have opted to continue to implement uniform MS4 Permit compliance programs across the entire Permit Area (for example municipal training programs educate inspectors about the impacts and

sources of pathogens and nutrients as opposed to offering separate sub-watershed specific training programs for the San Jacinto and Middle Santa Ana River sub-watersheds). The Permittees have indicated that as source assessments and monitoring data results from the aforementioned watershed efforts produce findings regarding potential urban sources of Pollutants of Concern, that they may opt, in the future, to develop specific action plans for the Middle Santa Ana River and San Jacinto River sub-watersheds, or potentially even tributaries there-of. If so, the DAMP will be appropriately modified to clarify the sub-watershed specific components.

The Permittees also currently implement interim hydromodification criteria and have committed to revising their hydromodification management programs based on studies currently being conducted by the Southern California Coastal Watershed Research Project. This Order requires the Permittees to continue to pursue these watershed planning efforts and enhance them as appropriate to address Pollutants of Concern.

J. To promote program transparency, this Order requires each Permittee to develop its own local implementation plan (LIP) that specifies:
    a. Specify how each program element of the DAMP shall be implemented;
    b. Describe the ordinances, plans, policies, procedures, and tools (e.g., checklists, forms, educational materials, etc.) used to execute the DAMP;
    c. Identify the organizational units responsible for implementation of each program element;
    d. Establish internal reporting requirements to ensure and promote accountability; and
    e. Describe an adaptive method of evaluation and assessment of program effectiveness for the purpose of identifying program improvements.

K. The audits conducted by Regional Board staff have also shown a significant deficiency in measuring program effectiveness. This Order requires quantifiable measures for evaluating program effectiveness.

L. The above-mentioned strategies for the fourth term Order build upon and continue the programs and policies developed by the Permittees during the prior permit terms as described in Sections VI and VII above.

M. A combination of these programs and policies and the requirements specified in this Order should ensure control of pollutants in Urban Runoff from MS4s owned and/or controlled by the Permittees.

VIII. ORDER REQUIREMENTS AND PROVISIONS

The legislative history of storm water statutes (1987 CWA Amendments), USEPA regulations (40CFR Parts 122, 123, and 124), and clarifications issued by the State Board (State Board Orders No. WQ 91-03 and WQ 92-04) indicate that a non-traditional NPDES permitting strategy was anticipated for regulating Urban Runoff. Due to the economic and technical infeasibility of full-scale end-of-pipe treatments and the complexity of Urban Runoff quality and quantity, MS4 permits generally include narrative requirements for the implementation of BMPs in place of numeric effluent limits.

The requirements included in this Order are meant to specify those management practices, control techniques and system design and engineering methods that will result in protection of the Beneficial Uses of the Receiving Waters consistent with the MEP standard. State Board (Orders No. WQ 98-01 and WQ 99-05) concluded that MS4s must meet the technology-based MEP standard and water quality standards (water quality objectives and Beneficial Uses). The U.S. Court of Appeals for the Ninth Circuit subsequently held that strict compliance with water quality standards in MS4 permits is at the discretion of the local permitting agency. Any requirements included in the Order that are more stringent than the federal storm water regulations are in accordance with the CWA Section 402(p)(3)(iii), and the California Water Code Section 13377 and are consistent with the Regional Board's interpretation of the requisite MEP standard.

The ROWD included a discussion of the current status of Riverside County's Urban Runoff management program and the proposed programs and policies for the next five years (fourth term Order). This Order incorporates these documents and specifies performance commitments for specific elements of the Permittees Urban Runoff management program.

This Order recognizes the significant progress made by the Permittees during the first three MS4 Permit terms in implementing the storm water regulations. This Order also recognizes regional and innovative solutions to such a complex problem, addresses deficiencies in the Permittees' Urban Runoff programs observed during the audits conducted by Regional Board staff, and considers comments by the USEPA on other draft MS4 Permits. This Order specifies quantifiable performance measures to determine compliance and assess the effectiveness of the Urban Runoff programs. This Order incorporates an integrated watershed approach in solving water quality and hydromodification impacts resulting from urbanization and aims to promote LID techniques as a key element to mitigate impacts from New Development and Significant Redevelopment projects. The proposed Order also requires the Permittees to attain TMDL WLA through BMP programs required in the respective approved TMDL Implementation Plans and through implementation of the program elements and BMPs specified in the DAMP, LIPs and this Order. The goal of these programs and policies that are included in this Order is to achieve and maintain water quality standards in the Receiving Waters.

The essential components of the Urban Runoff management program, as established by federal regulations [40 CFR 122.26(d)] are: (i) Adequate Legal Authority, (ii) Fiscal Resources, (iii) Storm Water Quality Management Program (SQMP) - (Public Information and Participation Program, Industrial/Commercial Facilities Program, Development Planning Program, Development Construction Program, Public Agency Activities Program, Illicit Connection and Illicit Discharges Elimination Program), and (iv) Monitoring and Reporting Program. The major sections of the requirements in this Order include: I. Facility Information, II. Findings, III. Permittee Responsibilities; IV. Discharge Prohibitions; V. Effluent Limitations and Discharge Specifications, VI. Receiving Water Limitations; VII. Legal Authority/Enforcement; VIII. Illicit Connections/Illegal Discharges; Litter, Debris and Trash Control; IX. Sewage Spills, Infiltration into MS4 Systems from Leaking Sanitary Sewer Lines, Septic System Failures, and Portable Toilet Discharges; X. Municipal Inspection Program, XI. New Development (including significant re-development);; XII. Public Education and Outreach; XIII. Permittee Facilities and Activities, XIV. Training Program For Storm Water Managers, Planners, Inspectors And Municipal Contractors; XV. Notification Requirements,; XVI. Program Management/Damp Review; XVII. Fiscal Resources, XVIII. Monitoring and Reporting Requirements; XIX. Provisions; XX Permit Modification, XXI. Permit Expiration and Renewal.

These programs and policies are intended to improve Urban Runoff quality and protect the beneficial uses of receiving waters of the region.

A. RESPONSIBILITIES

The responsibilities of the Principal Permittee are to coordinate the overall Urban Runoff management program and the Co-Permittees are responsible for managing the Urban Runoff program within their jurisdictions as detailed in the ROWD and the proposed Order, Order No. R8-2009-0033.

The existing Implementation Agreement needs to be revised to include the cities that were not signatories to this Agreement. The Order requires that a copy of the signature page and any revisions to the Agreement be included in the specified Annual Report.

B. DISCHARGE PROHIBITIONS

In accordance with CWA Section 402(p)(3)(B)(ii), this Order prohibits the discharge of non-storm water to the MS4s, with a few exceptions. The specified exceptions are consistent with 40 CFR 122.26(d)(2)(iv)(B)(1). If the Permittees or the Executive Officer determines that any of the exempted non-storm water discharges

is a significant source of pollutants, a separate NPDES permit or coverage under the Regional Board's De Minimus permit will be required.

C. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS, INCLUDING WASTE LOAD ALLOCATIONS FOR DISCHARGES TO 303(d) LISTED WATERBODIES WITH ADOPTED TMDLS

The Order clarifies allowed discharges and those discharges (only from Permittee owned or operated facilities and activities) allowed only if certain discharge specifications are met, such as those covered under the De Minimus Permit. These discharges should be consistent with the Regional Board's General De Minimus Permit for Discharges to Surface Waters, Order No. R8-2009-0003, NPDES No. CAG 998001. Permittees de minimus discharges covered under this Order include: 1) dewatering wastes from subterranean seepage, except for discharges from utility vaults; 2) discharges resulting from hydrostatic testing of vessels, pipelines, tanks, etc.; 3) discharges resulting from the maintenance of potable water supply pipelines, tanks, reservoirs, etc.; 4) discharges resulting from the disinfection of potable water supply pipelines, tanks, reservoirs, etc.; 5) discharges from potable water supply systems resulting from initial system startup, routine startup, sampling of influent flow, system failures, pressure releases, etc.; 6) discharges from fire hydrant testing or flushing; 7) air conditioning condensate; 8) swimming pool discharges; 9) discharges resulting from diverted stream flows; and 10) Construction dewatering wastes. The DAMP and the LIP are required to be revised to incorporate information regarding Permittees' de minimus discharges.

This Order requires Permittees to comply with established TMDL WLAs specified for Urban Runoff by implementing the necessary BMPs. NPDES regulations at 40 CFR 122.44(d)(vii)(B) require that permits be consistent with WLAs approved by the USEPA. WLAs in adopted TMDLs for the Middle Santa River (MSAR) Watershed Bacteria Indicator, and the Lake Elsinore/Canyon Lake (San Jacinto Watershed) Nutrient TMDL are included in this Order as Water Quality-Based Effluent Limitations (WQBELS). However, since the compliance dates of the adopted TMDLs are beyond the expected 5 year duration of this NPDES permit, this Order requires Permittees to establish BMP-based reduction goals and demonstrate through monitoring programs specified in the TMDL Implementation Plans and this Order the effectiveness of the BMPs implemented in reducing the Pollutants of Concern.

D. RECEIVING WATER LIMITATIONS

Receiving Water Limitations are included to ensure that discharges of Urban Runoff from MS4s do not cause or contribute to violations of applicable water quality standards in Receiving Waters. The compliance strategy for Receiving Water Limitations is consistent with the USEPA and State Board guidance and recognizes the complexity of Urban Runoff management.

This Order requires the Permittees to meet water quality standards in Receiving Waters in accordance with USEPA requirements, as specified in State Board Order No. WQ 99-05. If water quality standards are not met through implementation of certain BMPs, the Permittees are required to re-evaluate the programs and policies and to propose additional BMPs. Compliance determination will be based on this iterative BMP implementation process.

E. LEGAL AUTHORITY/ENFORCEMENT

Each Permittee has adopted a number of ordinances, municipal codes, and other regulations to establish legal authority to control discharges to the MS4s and to enforce these regulations as specified in 40 CFR 122.26(d)(2)(I)(B, C, E, and F. The Permittees are required to enforce these ordinances and to take enforcement actions against violators (40 CFR 122.26(d)(2)(iv)(A-D)).

The enforcement activities undertaken by a majority of the Permittees have consisted primarily of Notices of Violation, which act to educate the public on the environmental consequences of illegal discharges. In the case of the County, additional action has sometimes included recovery of investigation and clean-up costs from the responsible parties. In the event of egregious or repeated violations, the option exists for a referral to the County District Attorney for possible prosecution or to the Regional Board for enforcement under the California Water Code or the CWA. In order to eliminate unauthorized, non-storm water discharges, reduce the amount of pollutants commingling with Urban Runoff and thereby protect water quality, an additional level of enforcement is required between Notices of Violation and District Attorney referrals.

The third term permit required the Permittees to establish the authority and resources to administer either civil or criminal fines and/or penalties for violations of their local water quality ordinances. The Permittees now have this authority for penalties. Within the fourth term Order, Permittees are required to exercise this authority by developing an enforcement program to be administered within the industrial, commercial and construction elements of their Urban Runoff management programs. The enforcement program has been required to be included as an update to each Permittee's LIP. The effectiveness of this program must be documented in the Annual Reports submitted by the Permittees. However, it is acknowledged that once cases have been referred to the District Attorney or Environmental Crimes Task Force, etc. for prosecution, case details are confidential.

The fourth term Order further requires the Permittees to document and implement progressive and decisive enforcement actions, evaluate the

effectiveness of their enforcement program and sanctions by tracking compliance and evaluating the amount of time to return to compliance.

This Order requires the Permittees to include in the LIP their legal authority and mechanisms to implement the various program elements required by this Order to properly manage, reduce and mitigate potential pollutant sources within each Permittee's jurisdiction. The LIP shall include citations of appropriate local ordinances, identification of departmental jurisdictions and key personnel in the implementation and enforcement of those ordinances. The LIP shall include procedures, tools and timeframes for progressive enforcement actions and procedures for tracking compliance.

F. ILLICIT CONNECTIONS/ILLEGAL DISCHARGES; LITTER, DEBRIS AND TRASH CONTROL

Federal regulation, 40 CFR 122.26(d)(2(iv)(B), requires the Permittees to eliminate illicit discharges to the MS4s. The Permittees have completed a survey of the MS4 and eliminated or permitted all identified illicit connections. The Permittees have also established a program to address illegal discharges and a mechanism to respond to spills and leaks and other incidents of discharges to the MS4.

The Permittees currently have several programs to address IC/IDs:

1. The Permittees operate a toll free phone line, provide e-mail access for filing complaints and take direct calls regarding IC/ID reports from third parties. These reports are investigated by Permittee staff and reported in IC/ID investigation forms. All Permittee public education outreach materials promote the use of these reporting mechanisms.
2. Permittees staff receive training on identification and reporting of IC/IDs to appropriate Permittee staff. These reports are investigated and reported in IC/ID reporting forms.
3. The Permittees conduct industrial, commercial and construction inspections to identify potential IC/IDs. The outcomes of these inspections are reported in inspection reporting databases.
4. The Permittees contribute funds to the County Hazardous Materials Response Team to train and educate them to handle illegal or accidental hazardous waste discharges so as to prevent IC/IDs. A summary of HAZMAT activities is provided in the Permittees Annual Reports.
5. The RCFC&WCD monitors Office of Emergency Service reports for potential IC/ID incidents and investigates them as appropriate. Results are reported in the RCFC&WCD complaint call database and reported to the Permittees as appropriate.

6. The RCFC&WCD has developed an online GIS tool that identifies the location of District and Permittee facilities to facilitate IC/ID investigations and response.
7. The Permittees have developed a Sanitary Sewer Overflow Procedure to limit the potential for sewage spills to the MS4.
8. RCFC&WCD, as Principal Permittee, has dedicated staff that conducts dry weather monitoring and also evaluates RCFC&WCD MS4s for maintenance problems and/or IC/IDs. Detected IC/IDs from monitoring data or field inspections are reported to the District's NPDES section, logged into RCFC&WCDs complaint database, and reported to the appropriate Permittee for follow up action.

However, with a few exceptions, program evaluations conducted during the third term MS4 Permit showed that this program element is primarily complaint driven or an incidental component of municipal inspections or MS4 inspections for a number of Permittees. This Order requires the Permittees to ensure their LIPs describe each Permittee's plan for focused, systematic IC/ID investigations, outfall reconnaissance surveys, indicator monitoring, and track their sources[9]. A proactive illicit discharge detection and elimination (IDDE) program should be integrated with other LIP program elements as appropriate including: mapping of the Permittees' MS4 to track sources, aerial photography, Permittee inspection programs for construction, industrial, commercial, MS4, municipal facilities, etc., watershed monitoring, public education and outreach, pollution prevention, and rapid assessment of stream corridors to identify dry weather flows and illegal dumping.

G. SEWAGE SPILLS, INFILTRATION INTO MS4 SYSTEMS FROM LEAKING SANITARY SEWER LINES, SEPTIC SYSTEM FAILURES, AND PORTABLE TOILET DISCHARGES

Federal regulation, 40 CFR 122.26(d)(2)(iv)(B)(4), requires the Permittees to develop procedures to prevent, contain, and respond to spills that may discharge into the MS4s. The Permittees have already developed a program to address various types of spills to the MS4s. This Order requires the Permittees to continue to implement the unified sewer response plans in collaboration with the local sanitary sewer system operators. To facilitate swift response actions, the Permittees are required to provide 24-hour access to MS4s to the sanitary sewer system operators. The Permittees should also work cooperatively with the sanitary sewer system operators to determine if exfiltration from leaking sanitary sewer lines is causing or contributing to Urban Runoff pollution problems. In addition, the Permittees are required to control infiltration or seepage from sanitary sewers to the MS4s through routine preventive maintenance of the MS4 (40 CFR

[9] Table 2: Land uses, Generating Sites and Activities that Produce Indirect Discharges from IDDE, A Guidance Manual for Program Development and Technical Assessments, October 2004 CWP.

122.26(d)(2)(iv)(B)(7)). This Order also requires the Permittees to implement control measures and procedures to prevent, respond to, contain and clean up all sewage and other spills from sources such as portable toilets and septic systems.

On May 2, 2006, the State Board issued the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ (SSO Order) to address proper management and operation of sewer collection systems and to control sanitary sewer overflows. It requires dischargers/enrollees to develop and implement a written Sewer System Management Plan (SSMP) approved by the discharger's governing board and report sewer spills through an on-line reporting system. This Order requires the Permittees have reviewed the unified sewage spill response plan developed during the third term MS4 permit with the local sewering agencies and determined that it is consistent with the requirements of the SSO Order. This Order also requires each Permittee to include in its LIP the interagency or interdepartmental sewer spill response coordination and responsibilities.

The MS4 program audits indicated that a majority of the Permittees with septic systems have inadequate information with regard to the number and location of those systems within their jurisdiction. This Order requires the Permittees with septic systems to develop within 2 years of adoption of this Order, an inventory of septic systems within its jurisdiction and establish a program to ensure that failure rates are minimized.

H. MUNICIPAL INSPECTION PROGRAM;

Federal regulations, 40 CFR 122.26(d)(2)(iv)(A-D), require the Permittees to inventory, prioritize and inspect industrial, construction and commercial facilities. This Order requires the Co-Permittees to continue inspections of construction, industrial, and commercial activities within their jurisdiction in order to control the pollutants entering the MS4. The Co-Permittees will continue to maintain the inventory of facilities and sites in the above categories, prioritize these facilities based on threat to water quality, and perform regular inspections to insure compliance with local ordinances. While initial observations of non-compliance may result in 'educational' type enforcement, repeated non-compliance will result in more disciplinary forms of enforcement, such as monetary penalties, stop work orders or permit revocation.

An evaluation of Permittee inspection programs during the third term MS4 permit indicated certain deficiencies in the commercial, industrial and construction programs of some of the Permittees. In many instances, program documentation of progressive enforcement and facilities' return to compliance were not properly documented. This Order requires Permittees to document inspections and enforcement and evaluate the effectiveness of their inspection and enforcement program by tracking the time for facilities to return to compliance. The Permittees

who do not have an internet accessible database are required to initiate quarterly reporting and update of the inventory, inspection and enforcement database for facilities within their jurisdiction.

In order to address discharges to the MS4 from residential sources, the fourth term Order requires the Permittees to develop and implement a residential program to prevent residential discharges from causing or contributing to a violation of water quality standards in the Receiving Waters (40 CFR 122.26(d)(2)(iv)(A)).

I. NEW DEVELOPMENT (INCLUDING SIGNIFICANT REDEVELOPMENT)

Federal regulation, 40 CFR 122.26(d)(2)(iv)(A)(2), requires the Permittees to develop a comprehensive master plan to address discharges from New Development and Significant Redevelopment projects. During the third term MS4 permit, the Permittees revised their new development guidelines to address water quality and hydromodification impacts resulting from urbanization. A WQMP for Urban Runoff was approved by the Regional Board in 2004 and became effective in 2005. This Order requires the Permittees to continue to work towards the goal of restoring and preserving the natural hydrologic cycles in proposed urban developments by reviewing and approving project-specific WQMPs to address post-construction impacts. The WQMP should be designed to address water quality impacts, including hydrologic conditions of concern (HCOC), from New Development and Significant Redevelopment projects through: (1) site design BMPs, including LID techniques; (2) source control BMPs; and (3) treatment control BMPs. This Order recognizes the importance of LID techniques to minimize the impact of urbanization on water quality. This Order requires the project proponents to infiltrate, harvest and reuse, evapotranspirate, or bio-treat the volume of runoff from a 24-hour, 85th percentile storm event. The Order also provides alternatives and in-lieu programs for project sites where infiltration, harvesting and re-use, evapotranspiration and bio-treatment are not feasible.

Program evaluations conducted during the third term MS4 permit indicated a need for establishing a clear nexus between the watershed protection principles (including LID) and the planning and approval processes of the Permittees. This Order requires the Permittees to review and revise their Development Standards, Zoning Codes, Conditions of Approval, Development Project Guidance, ordinances, and other related documents to identify and eliminate barriers to incorporate watershed protection principles.

The Southern California Monitoring Coalition (SMC), including project lead agency, the San Bernardino County Flood Control District, in collaboration with SMC member, SCCWRP and the California Storm Water Quality Association (CASQA), is developing a LID Manual for Southern California with funding from the State Board, CASQA and other sources. This manual will be incorporated into the CASQA BMP Handbooks. The Permittees are encouraged to utilize the manual as a resource for proper LID design and implementation techniques.

Program evaluations have also shown deficiencies in the Permittees' inspection, and tracking of post-construction BMPs. This Order requires the Permittees to revise their close-out procedures to include field verification that site design, source control and treatment control BMPs are operational and consistent with the approved WQMP.

This Order incorporates new project categories and revised thresholds for several categories of new development and redevelopment projects that trigger the requirement for a WQMP. New project categories include streets, roads and highways of 5,000 square feet or more of paved surface and retail gasoline outlets (RGOs) with 5,000 square feet or more with 100 or more average daily vehicle traffic. The threshold criteria that trigger the WQMP requirement for non-residential commercial/industrial construction projects have been reduced from 100,000 square feet to 10,000 square feet or more of impervious surface. The threshold for residential subdivision projects has also been revised from 10 units or more to a threshold of 10,000 square feet or more of impervious surface. The 2008 National Research Council (NRC) report[10] indicates that roads and parking lots constitute as much as 70% of total impervious cover in ultra-urban landscape, and as much as 80% of the directly connected impervious cover. Roads tend to capture and export more storm water pollutants than other impervious covers. As such, roads are included as a priority development category for which WQMPs are required. The NRC report also indicates that there is a direct relationship between impervious cover and the biological condition of downstream receiving waters. The Permittees are required to address HCOC from New Development and Significant Redevelopment projects to minimize downstream impacts.

As public works, streets, roads and highway projects are the only facilities typically captured by the new WQMP category, and these projects typically have unique constraints that make them difficult to address through the WQMP process, a separate set of requirements has been established for addressing this category of development. Roads that are typically constructed as part of a development are typically incorporated into the broader WQMP for the development activity, providing more options for mitigation via the WQMP process.

Consistent with a long term holistic approach to address water quality and hydromodification impacts resulting from urbanization, this Order requires Permittees to continue to develop tools that facilitate integration of water quality, stream protection, storm water management and re-use strategies with land use planning policies, ordinances, and plans within each jurisdiction. These tools should address cumulative impacts of development on vulnerable streams, preserve or restore, consistent with the MEP standard, the structure and function of streams, and protect surface and groundwater quality. The Order specifies that the tools include strategies for addressing (303(d) listed waterbodies with adopted TMDLs with or without implementation plans as well as those Impaired Waterbodies without a TMDL. For those 303(d) listed waterbodies without a TMDL,

[10] National Research Council Report (2008), http://www.nap.edu/catalog.php?record_id=12465

the Permittees are required to include BMPs to control the discharge of the pollutants causing the impairment. The Permittees are also required to participate in the TMDL development and implementation.

J. PUBLIC EDUCATION AND OUTREACH;

Federal regulation, 40 CFR 122.26(d)(iv), requires the Permittees to develop a comprehensive storm water management plan with public participation and 40 CFR 122.26(d)(iv)(B)(6) requires the Permittees to engage in outreach activities to facilitate the proper management of pollutants. Public outreach is an important element of the overall urban pollution prevention program. The Permittees have committed to implement a strategic and comprehensive public education program to maintain the integrity of the receiving waters and their ability to sustain Beneficial Uses. The Principal Permittee has taken the lead role in the outreach programs and has targeted various groups including businesses, industry, development, utilities, environmental groups, institutions, homeowners, school children, and the general public. The Permittees have developed a number of educational materials, have established a storm water pollution prevention hotline, started an advertising and educational campaign, and distributed public education materials at a number of public events. The Permittees are required to continue these efforts and to expand public participation and education programs.

The Permittees have already developed fact sheets/BMPs to address sources from residential activities such as auto washing and maintenance activities; use and disposal of pesticides, herbicides, fertilizers and household cleaners; and collection and disposal of pet wastes. .

This Order requires the Permittees to review annually their public education and outreach efforts and revise their activities, if necessary, to address public outreach needs fed back from other storm water program elements. Federal regulation, 40 CFR 122.26(d)(v), requires the Permittees to conduct a program assessment to determine the reduction in pollutant loadings due to Urban Runoff management programs. Each Permittee is required to implement an assessment program, guided by the CASQA Guidance manual, to measure the change in behavior of its target communities to reduce discharge of pollutants to the MS4 and the environment.

K. PERMITTEE FACILITIES AND ACTIVITIES;

Federal regulation, 40 CFR 122.26(d)(iv)(A), requires the Permittees to ensure that public agency activities and facilities do not cause or contribute to violations of water quality standards in Receiving Waters. Education of Permittee planning, inspection, and maintenance staff is critical to ensure that Permittee facilities and activities do not cause or contribute to an exceedance of Receiving Water quality standards. The third term MS4 permit also specified minimum requirements for street sweeping and inspection and maintenance of drainage facilities. The

Permittees were also required to develop and distribute BMP fact sheets for various public agency activities. Permittee as well as contract staff that perform Permittee activities were required to be properly trained. The second and third term MS4 permits required the Permittees to prepare a Municipal Facilities Strategy (MFS) to ensure that public agency facilities and activities do not contribute pollutants to Receiving Waters. Each year, by August 1st, the Permittees are required to review their activities and facilities to determine the need for revisions to the MFS.

This Order continues and builds upon the requirement of the third term MS4 permit by requiring Permittees to include structural post-construction BMP information for certain Permittee projects along with the Notice of Termination submitted to the Executive Officer upon completion of the construction activity. The Notice of Termination must include photographs of the completed project, a location map, and for public works projects subject to a WQMP, structural post-construction BMP location, field verification report and identify long term operation and maintenance responsibility. Permittees are required to develop a database of post-construction BMPs for which the Permittees are responsible and shall reference this database in the LIP.

Program evaluations conducted during the third term MS4 permit indicated varying degrees of compliance at Permittee facilities and activities. This Order requires each Permittee to inventory its fixed facilities, field operations and MS4 facilities to ensure that Permittee facilities do not cause or contribute to a pollution or nuisance in Receiving Waters. These facilities and field operations are to be prioritized for inspection according to threat to water quality.

Fixed Permittee facilities and field operations include, but are not limited to fire training facilities, corporate yards, maintenance and storage yards, animal shelters, water treatment facilities, swimming pools, warehouses, and hazardous materials storage facilities, and recreation facilities. The Permittees are required to include in their LIP procedures and schedules for inspections and maintenance of Permittee facilities and activities. Some of these facilities are regulated under the General Industrial Permit.

L. PERMITTEE CONSTRUCTION PROJECTS

The third term MS4 permit authorized the discharge of storm water from construction activities on one acre or more that are under ownership or direct responsibility of the Permittees. The Permittees were required to notify the Executive Officer prior to commencement of construction activities, and to comply with the substantive requirements of the latest Statewide General Construction Activities Storm Water Permit.

Program evaluations conducted during the third term MS4 permit indicated that some of the Permittees were not submitting or were not aware of the requirement to submit a Notice of Intent and a Notice of Completion for Permittee construction projects.

M. TRAINING PROGRAM FOR STORM WATER MANAGERS, PLANNERS, INSPECTORS And PERMITTEE CONTRACTORS

Education of municipal planning, inspection, and maintenance staff is critical to ensure that land use decisions, local permit approvals and Permittee facilities and activities do not cause or contribute to an exceedance of Receiving Water quality standards. During third term MS4 Permit, the Permittees attended training classes specific to major storm water program elements including New Development/Significant Redevelopment, construction and industrial inspections, and Permittee activities.

This Order requires the Permittees to define the necessary expertise and competencies for various job functions involved in the implementation of the area-wide and local Urban Runoff management programs and to develop an appropriate curriculum. The training curriculum must be designed for Permittee facilities and field operations staff, Permittee inspection staff, storm water managers and those involved in the review and approval of WQMPs and CEQA documents, including Permittee contractors. The audits of the Permittees indicated the need for better inter-departmental collaboration and communication in the local Urban Runoff program implementation. The training curriculum needs to address effective communication between planners, plan reviewers, engineers and inspectors to ensure that appropriate post-construction BMPs are approved, installed, and are operational.

N. NOTIFICATION REQUIREMENTS

Most of the notification requirements that were spread throughout the third term MS4 permit were consolidated into one section.

O. PROGRAM MANAGEMENT ASSESSMENT/DAMP REVIEW

The DAMP is a management document that needs to be updated with the new requirements of this Order.

P. FISCAL RESOURCES

Each Permittee shall secure the resources necessary to meet all requirements of this Order and submit a financial summary to the Executive Officer of the Regional Board.

Q. MONITORING AND REPORTING REQUIREMENTS

During the first term MS4 permit and part of the second term MS4 permit, the Permittees conducted monitoring of the storm water flows, Receiving Water quality, and sediment quality. The Santa Ana Phase I NPDES Monitoring Program began in November 1991 with 27 monitoring sites. The program has been reduced in phases. There was a time where samples were collected on a rotational basis with no consistent monitoring from year to year. On April 14, 2003, with the submittal of an Interim Monitoring Program, monitoring at seven core sampling locations (Sampling Stations 040, 316, 318, 364, 702, 707, and 752) was established that provided representative and consistent monitoring results for the Permit Area.

The Riverside County monitoring programs, as well as other monitoring programs nationwide, have shown that there is a high degree of uncertainty in the quality of Urban Runoff and that there are significant variations in the quality of Urban Runoff spatially and temporally. However, most of the monitoring programs to date have indicated that there are a number of pollutants in Urban Runoff. A definite link between pollutants in Urban Runoff and Beneficial Use impairments has been established in a few studies.

This Order requires the Permittees identified as TMDL stakeholders in an approved TMDL to continue to participate in monitoring programs to support TMDL development and implementation. Specific implementation programs exist for the Middle Santa Ana River and Canyon Lake/Lake Elsinore TMDLs. Monitoring strategies shall be revised as necessary to evaluate the impacts of Urban Runoff on identified impairments within the Permit Area and the tributary 303(d) listed waterbodies.

The Implementation Plans for the Middle Santa Ana River Bacterial Indicator TMDL and Canyon Lake/Lake Elsinore Nutrient TMDL requires the Permittees to comply with TMDL Implementation Plan and to revise the DAMP to incorporate BMPs in the Permittees stormwater programs. This Order requires the Permittees to monitor the effectiveness of the BMPs specified in the TMDL Implementation Plan and the BMPs implemented as part of the DAMP, the LIP and this Order in reducing bacteria and nutrient, respectively, to meet the WLAs at representative urban runoff discharge monitoring locations by the compliance dates. Wet and dry seasons are defined differently by the various monitoring programs included in this Order. The Middle Santa Ana TMDL defines the wet

season as November 1 through March 31st and the Canyon Lake/Lake Elsinore TMDL monitoring defines it as October 1st through May 31st . All TMDL monitoring shall continue to be conducted based on the approved implementation plans.

This MS4 monitoring program includes sampling Urban Runoff at a variety of sites located throughout the Permit Area for three storm events per year. Urban Runoff samples will be collected and analyzed for a variety of constituents. In addition to these efforts, the Permittees are reevaluating their overall Urban Runoff monitoring program to determine its effectiveness in meeting the following objectives:

1. Assess rates of mass loading
2. Assess influence of land use on water quality
3. Assess compliance with water quality objectives
4. Assess effectiveness of water quality controls
5. Detect illicit connections and illegal discharges
6. Identify problem areas and/or trends
7. Identify pollutants of concern
8. Identify baseline conditions
9. Establish/maintain a water quality database

To accomplish these goals, the following activities are conducted:

1. Collect water quality data
2. Collect rainfall/runoff data
3. Establish quality assurance/control procedures
4. Conduct data analysis and archiving
5. Install and maintain appropriate equipment
6. Prepare an Annual Report

RCFC&WCD, in its role as Principal Permittee, participates in the SMC and other task forces. The goal of the SMC is to develop the technical information necessary to better understand storm water mechanisms and impacts, and then develop the tools that will effectively and efficiently improve storm water decision-making. Some of the cooperative monitoring efforts conducted through the SMC and other task forces include Comparative Evaluation of Microbial Source Tracking Techniques, Model Monitoring Program Guidance, Peak Flow Study, and Laboratory Inter-Calibration Studies. Under the auspices of the SMC, SCCWRP prepared "Model Monitoring Program for Municipal Separate Storm Sewer Systems in Southern California", August 2004 Technical Report No. 419. This report noted, "...the lack of mass emissions stations in the inland counties hampers their ability to estimate the proportional contribution of these inland areas to cumulative loads downstream." The SMC consists of representatives from the Counties of Ventura, Los Angeles, Orange, San Bernardino, Riverside, and San Diego and the Cities of Long Beach, and Los Angeles, the Los Angeles, Santa Ana

and San Diego Regional Boards, the State Board, SCCWRP, Caltrans, and the USEPA. This Order requires the Permittees to continue mass emissions monitoring to determine pollutant loading.

During the second and third term MS4 permits, there was an increased focus on watershed management initiatives and coordination among the MS4 permittees in Orange, Riverside and San Bernardino Counties. The MS4 permittees participated in a number of regional monitoring programs and other coordinated program and policy developments, such as the Regional Integrated Freshwater Bioassessment Monitoring Program, and the BMP Effectiveness Assessment. The Principal Permittee continues to be an active participant in the Storm Water Quality Standards Task Force (SWQSTF), Middle Santa Ana River (MSAR) Bacterial Indicator TMDL, Canyon Lake/Lake Elsinore (San Jacinto) Nutrient TMDL and the SMC. This Order recommends the Permittees continue their participation in these types of watershed coordination efforts and provides them with opportunities to use these efforts to comply with applicable requirements of the Permit.

The third term MS4 permit required the Permittees to initiate bioassessment monitoring. To allow for a holistic approach, this Order requires the Permittees to participate in the Regional Integrated Freshwater Bioassessment Monitoring Program in lieu of a separate bioassessment monitoring program for the Permit Area.

This Order requires the Permittees to re-evaluate their CMP and submit a revised plan for approval. The revised CMP should integrate the goals and objectives of the Watershed Action Plan and rectify data gaps from previous monitoring efforts.

R. PROVISIONS – Standard Language per NPDES regulations.

S. PERMIT MODIFICATION– Standard Language per NPDES regulations.

T. PERMIT EXPIRATION AND RENEWAL– Standard Language per NPDES regulations.

IX. WATER QUALITY BENEFITS, COST ANALYSIS, AND FISCAL ANALYSIS

There are direct and indirect benefits from clean lakes and beaches, clean water, and a clean environment. It is difficult to assign a dollar value to the benefits the public derives from fishable and swimmable waters. In 1972, at the start of the NPDES program, only 1/3 of the U.S. waters were swimmable and fishable. In 2008, more than 2/3 of the U.S. waters met these criteria. In the 1999 "*Money"* magazine survey of the "Best Places to Live", clean water and air ranked as two of the most important factors in choosing a place to live. Thus environmental quality has a definite link to property values.

The true magnitude of the Urban Runoff problem is still elusive and any cost estimate for cleaning up Urban Runoff would be premature short of end-of-pipe treatments. For Urban Runoff, end-of-pipe treatments are cost prohibitive and are not generally considered as a technologically feasible option. Over the last decade, the Permittees have attempted to define the problem and implemented BMPs to the MEP to combat the problem.

The costs incurred by the Permittees in implementing these programs and policies can be divided into three broad categories:

A. Shared costs: These are costs that fund activities performed mostly by the Principal Permittee under the Implementation Agreement. These activities include overall storm water program coordination; intergovernmental agreements; representation at the Storm Water Quality Standards Task Force, Regional Board/State Board meetings and other public forums; preparation and submittal of compliance reports and other reports required under the NPDES permits, responding to Water Code Section 13267 requests, budget and other program documentation; coordination of consultant studies, Co-Permittee meetings, and training seminars.

B. Individual Costs for DAMP Implementation: These are costs incurred by each Permittee for implementing the BMPs (drainage facility inspections for illicit connections, drain inlet/catch basin stenciling, public education, etc.) included in the DAMP. A number of programs and policies for non-point and storm water pollution controls existed prior to the MS4 permit program. However, the DAMP that was developed and implemented in response to the MS4 permit program required additional programs and policies for pollution control.

C. Individual Costs of Pre-Existing Programs: These are costs incurred by each Permittee for water pollution control measures which were already in existence prior to the MS4 permit program. These programs included recycling, litter control, street sweeping, drainage facility maintenance, and emergency spill response.

Historically, the Permittees have employed four distinct funding methods to finance their NPDES Activities. Many Permittees utilize a combination of these funding sources. The different methods include:

A. <u>Santa Ana Watershed Benefit Assessment Area</u>

In 1991, the RCFC&WCD established the Santa Ana Watershed Benefit Assessment Area (SAWBAA) to fund its NPDES activities. Currently, SAWBAA revenues fund both area-wide NPDES program activities and the RCFC&WCD's individual MS4 permit compliance activities.

B. County Service Area 152

In December 1991, the County of Riverside formed County Service Area 152 (CSA 152) to provide funding for compliance activities associated with its NPDES permit activities. Under the laws that govern CSAs, sub-areas may be established within the overall CSA area with different assessment rates set within each sub-area. The cities of Corona, Moreno Valley, Norco, Riverside, Lake Elsinore and San Jacinto elected to participate in CSA 152.

C. Utility Charge

The City of Hemet funds a portion of its NPDES program activities through a utility charge.

D. General Fund /Other Revenues

Permittees also utilize general fund revenue to finance their NPDES activities. Several Permittees also report using general fund and other revenue sources (e.g., gas taxes, developer fees, etc.) to fund a portion of their Urban Runoff management activities.

The Annual Report provides the most recent budgets and expenditure projections available for the costs incurred by the Permittees in implementing these programs and policies. The following information, in parenthesis, on the current economic conditions was provided by the Permittees.

{Current Economic Conditions
The following information was provided by the Permittees and does not constitute a finding by the Regional Board:

Historically, the Permittees have employed several funding methods to finance their MS4 Permit compliance activities. Unfortunately, the mortgage crisis, collapse of the housing market and the economic recession has resulted in the cessation of virtually all development activity and has significantly reduced sales tax revenue. Property tax revenues have been reduced by the high level of foreclosure activity and reduced property values. Property tax revenues have been further reduced by homeowner requests for reassessments to reflect the reduced property values. The impact of these economic conditions on the Permittees in the Santa Ana Region has been particularly severe. As a result, funds typically provided by these funding methods has been severely reduced, and it is anticipated that this condition will continue for an indefinite period. The funding methods historically used and the effects of the economic situation on the availability of funds through these sources are summarized as follows:

- Santa Ana Watershed Benefit Assessment Area. In 1991, the District established the Santa Ana Watershed Benefit Assessment Area to fund its MS4 Permit compliance activities. Currently, the Benefit Assessment revenues fund the District's share of the area-wide MS4 Permit program activities and the District's individual compliance activities as a Permittee. Under the Benefit Assessment each parcel is taxed based on the impervious area of each parcel at a set rate established through Proposition 218. This rate has not been increased since 1991 and increases in revenues have resulted from increases in the number of contributing parcels resulting from New Development. In 2007/08 the Santa Ana Benefit Assessment generated approximately $2,030,000 in revenue. These revenues are used to fund the District's compliance activities and the bulk of the administrative costs associated with the District's duties as Principal Permittee.

  Outlook: The District expects at best to maintain, if not see temporary reductions in Benefit Assessment revenues due to the significant number of homes that are not paying property tax due to foreclosure. An increase in the established Benefit Assessment rate to compensate for these reductions would require approval of 2/3 of the voters or 50% of the property owners and is unlikely, especially in the current economic climate. An increase in the number of contributing parcels will not occur until the development industry recovers.

- General Fund/Other Revenues. The County and the Cities utilize general fund revenue to finance most of their MS4 Permit compliance activities. General fund revenue is generated by property tax, sales tax, and auto license taxes.

  Outlook: The Permittees expect a continued reduction in the funds available through General Fund/Other Revenues through at least FY 2009/2010. Although optimistic that conditions will begin to stabilize toward the end of 2009, the Permittees cannot speculate as to when revenues will recover to previous levels. Historically, the Permittees have investigated other funding sources, including a phone survey conducted by LESJWA with support from the District and the County of Riverside to evaluate the possibility of passing a new assessment to fund water quality improvements benefiting Lake Elsinore. The results of the survey found insufficient voter support for water quality related issues to move forward with a special election. The Permittees have also formed a finance committee which has met several times to obtain information about actions that they can take to maximize revenues and potential alternative funding sources. These efforts met with some success, particularly in relation to maximizing fees for service; however significant new funding sources were not identified or available to the Permittees even during the more favorable economic conditions experienced during the term of the 2002 Riverside County MS4 Permit.

- Fees. Several Permittees charge fees for services such as inspections, plan check and other recoverable costs related to compliance with the 2002 Riverside County MS4 Permit. These fees cover both the direct and indirect costs associated with conducting these inspections/reviews including associated compliance tracking and reporting.

  Outlook: It is notable that, with the virtual collapse of the development industry in the Santa Ana Region, the fees received by the Permittees for review of new developments and construction inspections have been significantly reduced. With this reduced level of fee-based income, maintenance of the existing inspection and plan review programs will place a burden on overall funding of the compliance programs. The Permittees do not expect revenues from fees to recover until the development industry recovers. Even with recovery of the development industry, it is anticipated that revenues from fees will be reduced for the majority of the Cities within the Santa Ana Region and the County due to the reduced area remaining for development in their jurisdictions.

- Grants. The Permittees have actively pursued and, as available, used grants to fund compliance programs.

  Outlook: In December the State's budget crisis resulted in a directive to State agencies from the Department of Finance to halt projects that rely on bond funds, including those funded by Proposition 40, Proposition 50 or Proposition 84. The State of California is the primary source of grant funding for water quality projects. Future availability of funds to resume compliance projects funded by grants is uncertain.

It is clear that the current economic climate and that of the foreseeable future is creating a significant burden upon the Permittees that will make the continuance of all existing MS4 Permit compliance programs difficult. If new funding sources or alternative combinations of funding sources cannot be identified , it is likely that compliance program funding will be reduced.

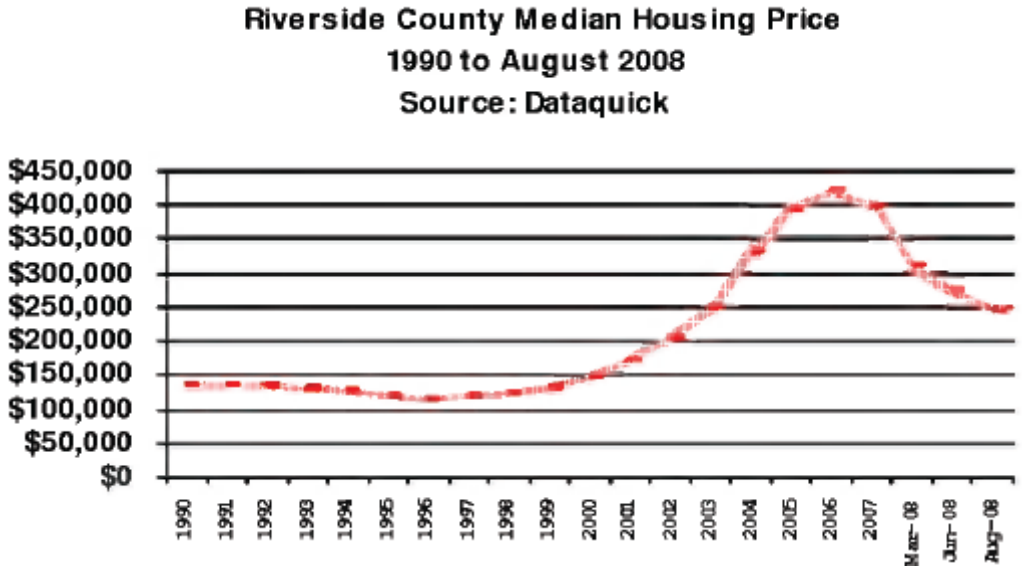
Economic Projections

According to Chicago Title, Southwest Riverside County has experienced a very significant increase in supply of single-family residential units on the market. As a result, housing price indicators are very negative. In the majority of the Southwest Riverside submarket, the pending price is less than closing price that suggests the weakness of the market. The October 2008 count of bank owned (REO) properties for Riverside County as a whole was 12,078. The number of foreclosures was 23,480. The presence of high levels of REO properties will continue to negatively

affect the price line. In addition, the level of foreclosures is increasing. At the end of January 2009, 68% of the homes listed for sale are foreclosures or short sales.[11]

With regard to other sectors of the economy, Riverside County has taken a serious turn for the worst in 2008, with projections indicating that the severe downturn will continue through 2009 at the very least. The economic difficulties being faced in the Southwest Riverside submarket is the result of the dramatic downturn in the housing market in this area, the national financial turmoil, the worldwide credit crisis, and the increasing consumer debt crisis. According to Beacon Economics, a respected economics consulting firm in Los Angeles, Inland Southern California is clearly at the epicenter of this economic turmoil, with extremely high rates of unemployment at present. Unemployment rates in Inland Southern California are expected to reach 12.4% (Riverside County beat that – unemployment was 13.7% in June 2009 – California Employment Development Department) before this deep recession is over. Housing prices are expected to continue their precipitous decline from their peak levels in the two Inland Southern California counties through at least 2011. According to Dataquick, median home prices in Riverside County peaked at $415,000 in January 2007. At the end of this cycle, the median home price in Riverside County is expected to be $198,000. Figure 1 depicts the median housing price in Riverside County over the period 1990 to August 2008.

Figure 1. Riverside County Median Housing Price (1990 – August 2008)



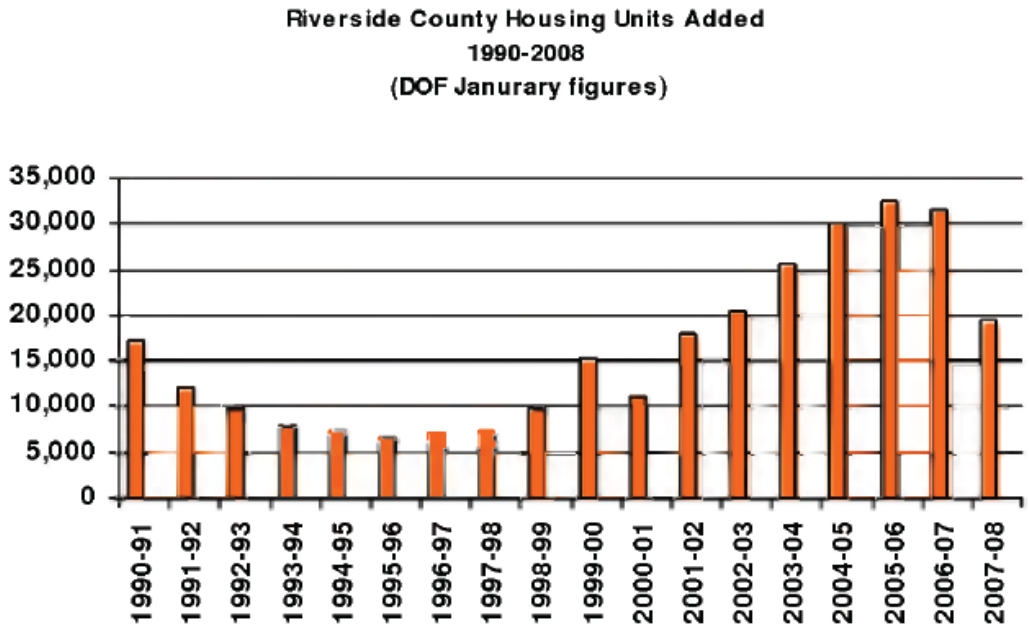
Source: Riverside County Center for Demographic Research. 2008. Riverside County Progress Report, pg 14.

[11] Orange County Register, January 27, 2009, p. 11.

Local Government sales tax revenues remained fairly stagnant through 2006 and began to decline in early 2007, according to Beacon. By the second quarter of 2008, the taxable sales in Riverside County declined by 7.7%. This will continue with taxable sales possibly bottoming out by 2010. These shocks are expected to continue and accelerate within the southwest Riverside County economy.

As a direct outcome of the current economy and the economic outlook into the term of the 2009 Riverside County MS4 Permit, the number of New Development proposals has plummeted and any significant rebound is not forecast. New and redevelopment projects will likely remain minimal. As shown in Figure 2, the number of housing units being added each year has dropped below the levels seen at any point in time during the 2002 Riverside County MS4 Permit. These numbers will likely continue to decrease for a significant portion of the new 2009 Riverside County MS4 Permit term.

Figure 2. Riverside County Housing Units Added (1990 – 2008)



Source: Riverside County Center for Demographic Research. 2008. Riverside County Progress Report, pg 12.

These economic issues and projections directly affect and limit both:

- The need for including enhanced New Development and Significant Re-development requirements in the 2009 Riverside County MS4 Permit, and

- The Permittees ability to fund, and even seek new funding sources for additional MS4 Permit requirements for New Development and Significant Re-development projects.

Permittee specific projections are as follows:

County of Riverside

The County is operating with a structural deficit of $12 million and plans a 25% budget reduction from FY 2008/2009 through FY 2011/2012. The County's current budget of $4.7 billion represents a 5% reduction from the previous year and next year's budget is expected to be cut by 10%. These cuts are directly associated with the decline in property values caused by the high number of foreclosures. There are concerns about having to use discretionary funds to meet State mental health and social service mandates. In addition, the County is dependent on funds from Federal and Sstate sources. If during this time of economic crisis Federal and State funding sources are reduced or eliminated, any unfunded programs will be terminated. Only core County programs will continue.

The primary source of general fund revenue is from property taxes and sales tax. With the unprecedented number of foreclosures, reduced property values, and declining sales, general fund revenue is in a downward spiral. Another source of funding is through the Solid Waste Tipping Fees paid at the County landfills. Volume is down 15% since 2006 with anticipated downward trend to 40% reduction in solid waste through 2014. Programs that are partially funded through tipping fee allotments will be impacted. Due to the declining economy the recycling market has collapsed. Virtually no recyclable materials are being shipped for reprocessing. This loss of revenue and increased disposal costs is further impacting the general fund.

Cuts of 25% for all Net County Cost general fund programs will translate into reduction of County services and elimination of unfunded State and Federal programs. Only core value programs will be provided (including public safety and fee programs).

The County has instituted a hiring freeze and required each department to create a report outlining the projected effects of the budget cuts. The County currently employs over 20,000 people, and layoffs are expected to result from the findings of these departmental reports. It is anticipated that this will impact program delivery for stormwater related activities. No County department will be able to sustain current staffing levels as they try to meet the 25% budget reduction strategy.[12] [13]

City of Menifee

The newly incorporated City of Menifee FY 2008/2009 initial budget was estimated from their comprehensive fiscal analysis that was submitted to the

[12] "The Realities of Recession in California: A Statewide Report by U.S. Senator Barbara Boxer, December, 2008, p. 18.
[13] Riverside County Executive Office, January, 2008.

Local Agency Formation Commission during the incorporation process. Because of the economic uncertainty, and the fact that the City is only now beginning to staff positions, it is unknown what the immediate impact of the fiscal crisis will be. The County is responsible for assisting the City in meeting its MS4 Permit compliance requirements during the first year of incorporation which expires October 1, 2009. Currently, the level of property tax revenue that will be available to the City is uncertain. Funding for MS4 Permit compliance requirements was not explicitly budgeted. A financial hardship currently exists because of the costs associated with incorporation.

City of Murrieta

The City of Murrieta's FY 2008/2009 budget did not increase compared to FY 2007/2008. The City has identified a $3.3 million budget shortfall for the current fiscal year ending on June 30, 2009. This represents approximately 8.2% of the City's projected revenue which must be absorbed in five months. The shortfalls are primarily due to reduced sales tax and property tax revenues. Department heads are currently working on revised budgets to adjust for the loss in revenue.

Additional, budget cuts are anticipated for FY 2009/2010 because the immediate economic outlook is not good. There have been approximately 2,000 home foreclosures within the City. Sales tax revenue is estimated to drop 12.5%, property tax revenue will drop, and the State took approximately $525,000 out of redevelopment funds. Murrieta did not receive any vehicle licensing fees from the State and it appears likely that the State will take more revenue from the Cities to solve its budget problems. New NPDES requirements that increase compliance costs will create a financial hardship for the City.

City of Riverside

The City of Riverside has seen declining general fund revenue over the last two fiscal years in virtually all categories. The City's most recent projection indicates that total general fund revenues for the current fiscal year will be under $200 million, down from a budget of $215 million as adopted, and $226.5 million in the prior fiscal year. This represents a decline over two fiscal years of approximately 12%. Specifically, property tax and sales tax revenue continue their decline, which is primarily attributable to decreased residential construction activity and in the case of sales tax declining automobile sales.

The decline in revenue has resulted in a corresponding reduction to general fund expenditures. Specifically, approximately 12% of the positions authorized for the general fund have been vacated and unfunded, either through transferring staff to other funds, attrition or limited layoffs of temporary and contract staff. Additionally, the level of service provided to the community in virtually all City departments has been reduced through funding reductions

to items such as street maintenance, recreation programs and libraries, though great care has been taken to minimize the impact of cuts to the public. It is anticipated that in the near term the economic situation will not improve, and staff is preparing a budget for the upcoming fiscal year that anticipates further decreases in revenue.

City of Wildomar

The newly incorporated City of Wildomar FY 2008/2009 initial budget was estimated from their comprehensive fiscal analysis that was submitted to the Local Agency Formation Commission during the incorporation process. Because of the economic uncertainty, and the fact that the City is only now beginning to staff positions, it is unknown what the immediate impact of the fiscal crisis will be. The County is responsible for assisting the City in meeting its MS4 Permit compliance requirements the first year of incorporation that expires July 1, 2009. Currently, the level of property tax revenue that will be available to the City is uncertain. Funding for MS4 Permit compliance requirements was not explicitly budgeted. A financial hardship currently exists because of the costs associated with incorporation.}

X. ANTIDEGRADATION ANALYSIS

The Regional Board has considered whether a complete antidegradation analysis, pursuant to 40 CFR 131.12 and State Board Resolution No. 68-16, is required for these Urban Runoff discharges. The Regional Board finds that the pollutant loading rates to the Receiving Waters will be reduced with the implementation of the requirements in this Order. As a result, the quality of Urban Runoff discharges and Receiving Waters will be improved, thereby improving protection for the Beneficial Uses of Waters of the U.S. Since this Order will not result in a lowering of water quality, a complete antidegradation analysis is not necessary, consistent with the federal and state antidegradation requirements.

XI. PUBLIC WORKSHOP

Regional Board proposes to conduct at least one public workshop and a subsequent public hearing. The first workshop to review the proposed Order and to get public comments is scheduled as follows:

Date and time: August 3, 2009; meeting starts at 9:00 a.m.
Location: City of Loma Linda, Council Chambers
25541 Barton Road
Loma Linda, CA

The details regarding any subsequent workshops and the public hearing to consider adoption of the proposed Order will be posted on the Regional Board's website at:

http://www.waterboards.ca.gov/santaana/water_issues/programs/stormwater/riverside_permit.shtml

This information may be also obtained by calling the Regional Board office at 951-782-4130.

The Regional Board recognizes the significance of Riverside County's Storm Water/Clean Water Protection Program and will conduct, participate, and/or assist with at any workshop during the term of this Order to promote and discuss the requirements of this Order and the progress of the Urban Runoff management program. The details of the public workshops will be posted on the Regional Board's website indicated above. Persons wishing to be included in the mailing list for any of the items related to this permit may register their name, mailing address and phone number with the Regional Board office at the address given below.

XII. PUBLIC HEARING

The Regional Board will hold a public hearing regarding the proposed waste discharge requirements. A Notice of Public Hearing will be also published in the Legal Notices section of a local newspaper. The public hearing will be scheduled at a later time, information regarding the public hearing will also be posted on the website indicated above. Further information regarding the conduct and nature of the public hearing concerning these waste discharge requirements may be obtained by writing or visiting the Santa Ana Regional Board office, 3737 Main Street, Suite 500, Riverside, CA 92501. This and other information are also available at the website at: www.waterboards.ca.gov/santaana.

XIII. INFORMATION AND COPYING

Persons wishing further information may write to the above address or call Keith Elliott at (951) 782-4925. Copies of the application, proposed waste discharge requirements, and other documents (other than those which the Executive Officer maintains as confidential) are available at the Regional Board office for inspection and copying by appointment scheduled between the hours of 8:30 a.m. and 4:00 p.m., Monday through Friday (excluding holidays, and furlough days).

XIV. REGISTER OF INTERESTED PERSONS

Any person interested in a particular application or group for applications may leave his name, address and phone number as part of the file for an application. Copies

of tentative waste discharge requirements will be available on the web for all interested parties to download.

E-mail registration:
http://www.waterboards.ca.gov/resources/email_subscriptions/reg8_subscribe.shtml

XV. RECOMMENDATION

At the August 3, 2009 Public Workshop, the Board will not take any action on the proposed Order.